DOCUMENT RESUME

ED 040 479 08 CG 005 684

AUTHOR Dales, Ruth J.; Walters, James
TITLE Factors Related to Educational and Occupational Aspirations of Adolescent Males From Culturally Deprived Families. Final Report.
INSTITUTION Florida State Univ., Tallahassee.
SPONS AGENCY Office of Education (DHEW), Washington, D.C. Bureau of Research.
BUREAU NO BR-5-0197
PUB DATE Aug 69
CONTRACT OEC-5-85-058
NOTE 212p.

EDRS PRICE EDRS Price MF-$1.00 HC-$10.70
DESCRIPTORS Academic Aspiration, *Adolescents, Anxiety, *Aspiration, *Culturally Disadvantaged, Lower Class, Males, Occupational Aspiration, *Racial Differences, *Self Concept

ABSTRACT

Purposes of this longitudinal study were: (1) to determine any relationship between self concept, anxiety, family adjustment, parental aspirations, and the level of aspirations of lower class black and white boys; (2) to relate the IQ level to aspiration level; and (3) to determine over a span of three years what significant changes occur for each race in self concept, anxiety, and family development. Final data were analyzed for 762 youths, evenly divided by race, with IQ's ranging from 70 to 142. Results showed that both races held high self concepts with blacks holding consistently higher self concepts than whites. Both groups were initially highly anxious, with whites becoming considerably less so with time while blacks remained quite anxious. White boys had slightly better family adjustment scores than black boys. Data presented should help vocational counselors to be sensitive to highly anxious boys with unrealistic aspirations. (Author/CJ)

BR 5-0197
PA 08
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ED0 40479

FINAL REPORT
Project No. 5-0197
Contract No. OE-5-85-058

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FACTORS RELATED TO EDUCATIONAL AND OCCUPATIONAL ASPIRATIONS OF ADOLESCENT MALES FROM CULTURALLY DEPRIVED FAMILIES

Ruth J. Dales and James Walters
Department of Home and Family Life
The Florida State University
Tallahassee, Florida

August, 1969

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The research reported herein was performed pursuant to a grant with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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ACKNOWLEDGEMENTS

This project would not have been possible without the cooperation and assistance of many dedicated persons. Gratitude is expressed to the 1200 youth who willingly answered the questionnaires over the three years, and to the many guidance counselors, principals and county superintendents who gave their time. To Dr. Carl Proehl, Director of Vocational Services, State Department of Education in Florida and his research staff, appreciation is extended for initial planning.

Grateful acknowledgement is made to the eight doctoral students who held research assistantships on the project and now have completed their Ph.D. degrees. Summaries of their dissertations covering periods of time from this project are described in the Appendix. These are Joseph Maxwell, Doris Hewitt, Beverly Schmalzried, Millard Bienvenu, Neil Covington, K. Francis King, Nylda Lopez and James Keller. Other doctoral students who assisted in various phases of the project as research assistants through the four-year period are also acknowledged: Don Barash, Jerry Bigner, Tom Cuttino, Harry Guest, Dean Hoffman, Lola Jackson, Mary Massey, Joe Montgomery, Gladys Phelan, Jane Rhoden, Robert Schuckert, Roy Sumpter. Special appreciation and recognition is due to James Keller, Jerry Bigner and Joseph Maxwell for their efforts in the final analysis of the data and with the Computer Services. Both Regina Caveny and Charles Akers are to be commended for their tireless efforts at the Computing Center on the detailed programming.

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SUMMARY

Further evidence is needed regarding the influences which determine the educational and occupational aspirations of adolescent boys from culturally deprived areas who continue to remain in school. Factors such as intelligence, self concept, anxiety, and residing in small communities may have an effect on future plans of lower-class youth.

A four-year longitudinal project was focused on adolescent boys from lower-class families who were black or white youth in the 8th, 9th, or 10th grade in the fall of 1965. They were studied for three years in 29 schools in culturally deprived areas of North Florida by means of 9 separate instruments which were repeated in each of the three successive years. They were evenly divided by race, and IQ's ranged from 70 to 142. Initially 1425 boys were in the project with 1213 retained through the first year. In successive years the sample dropped 22% to 952, then only 7% to 890 and the final data were analyzed on 762. They were retained for data analysis only if all 9 instruments were completely answered in all three years, a total of 27 questionnaires per boy or a total of 27,495 instruments were analyzed. Over the three years a small percentage left school or moved to other schools not in the project.

The purposes of the study were as follows:

1. To determine the relationship between self concept, anxiety, family adjustment, parental aspirations and the level of educational and occupational aspirations of lower-class black and white adolescent boys
2. To relate the level of IQ to the level of educational and occupational aspirations of the sample
3. To determine over a span of three years what significant changes occur for black and white youth separately in self concept, anxiety, and family development
4. To denote differences between scores of black and white youth in self concept, anxiety, and family adjustment

The instruments utilized were coded, placed on tape, and computerized. For statistical analysis, in order to make year to year comparisons, a paired t test was used. For each comparison, the data were pooled in such a manner that all possible scores for a grade were used, disregarding the year of administration of the instrument. To make chi-square comparisons between various instruments, the sample were split into six groups in order to control for grade and race.

The results of the study showed definite developmental trends year by year as the adolescents grew older. The white boys had high self concepts and these increased with age. The black youth also had

high self concepts and they were consistently higher than the white youth. In anxiety white boys had high anxiety the first year but as age increased, anxiety decreased. The black youth were highly anxious as young adolescents and decreased very slightly as age increased. They were consistently more anxious than white youth. Both white and black youth had good family adjustment scores. However, white boys had better family adjustment than black youth.

The large proportion of black youth in all grades may be described by low IQ and high educational aspirations. With occupational aspirations in all grades the largest proportion possess low IQ and medium aspirations.

This project is encouraging to educators and especially to vocational counselors. It is important to recognize that there are developmental trends with adolescents. Boys in early adolescence tend to have unrealistic goals and need encouragement to acquire good work habits with furthering of education. Counselors need to be sensitive to highly anxious boys and to know that developmentally such youth may change unrealistic aspirations as they become more mature. Assisting youth in acquiring and maintaining good self concepts is a goal for both parents and educators in today's world.

INTRODUCTION

The need to encourage youth to pursue their education has received increased emphasis within the last decade. Adolescents, both black and white who come from culturally deprived areas in the south may have potential to succeed dependent upon certain understandings about such youth. Educators need to determine what influences motivate lower-socio-economic boys to continue with education. Certain factors in the environment need further insight into understanding the aspirations of adolescents as to their future educational and occupational goals.

It is clear that more boys in culturally deprived areas need to avail themselves of the vocational opportunities which are already in existence. For the further success in our national vocational programs there is a need to determine what factors are associated with aspirations. Such factors that may be promising may be the relationship of self concept or anxiety or family adjustment to educational or occupational future plans. Guidance counselors and vocational educators may be of prime importance in directing potential youth with high aspirations to succeed.

In designing the present investigation, it appeared essential to study boys who have not yet attained the possible age of leaving school and follow them for a three-year period. Since a very low income area exists in northern Florida, and school personnel in that area were cooperative, such a study was feasible.

PURPOSES

1. To determine the relationship between self concept, anxiety, family adjustment, parental aspirations and the level of educational and occupational aspirations of lower-class black and white adolescent boys

2. To relate the level of IQ to the level of educational and occupational aspirations of the sample

3. To determine over a span of three years what significant changes occur for black and white youth separately in self concept, anxiety and family adjustment

4. To denote differences between scores of black and white youth in self concept, anxiety, and family adjustment

REVIEW OF LITERATURE

A few pertinent studies have been selected for review that focus on educational and vocational aspirations.

Middleton and Grigg (1959) tested the hypothesis that youth with rural background achieve less mobility in the urban market than those reared in the city due to their lower occupational and educational aspirations. Basing the study on data drawn from a group of twelfth-grade students, it was found that among Negro males and females there were no significant urban-rural differences in either occupational or educational aspirations. The investigators point out that this is perhaps due to the fact that Negroes who remain in school through the twelfth grade are a very select group, and it may be that it is precisely this group among Negroes who have uniformly high occupational and educational aspirations whatever their community of residence.

Burchinal (1961) has conducted a study which explored differences between farm and non-farm high school males. Findings generally indicated that lowest levels of educational and occupational aspirations were observed for the farm boys, while the highest levels were observed for the nonfarm (metropolitan) males. Burchinal suggested that these differences were perhaps due to familial influences and socialization experiences on the boys' aspiration levels.

Woronoff (1962) has provided a description of Negro male identification problems and their relation to educational achievement. The author pointed out that in trying to better his lot, the Negro faces social, psychological, and economic problems. Noting that the lower-class Negro family pattern consists of a female-dominated household regardless of the presence or absence of the father, the male child sees father's low job status and recognizes that outsiders regard him as lowly. Thus, the Negro male adult provides a poor model for his sons. Our society demands that a man assume a man's role before he is equally adeptable, and the Negro boys have no model to aid in learning the male role.

The relationship between the occupational preferences of superior high school students and their fathers' occupational status was examined by Mowsesian, Heath, and Rothney (1966). Analysis of data indicated that both male and female superior students tended to state vocational preferences at the professional level early in high school and to maintain this preference throughout. Their occupational preferences were generally at a higher level than those of their fathers. There was no trend away from general preferences for work at a professional level toward naming of specific occupations within that level. The results suggested that theories of vocational development that imply that stages are passed through during later adolescent periods do not apply to the superior student population of this study.

Rehberg and Westby (1967) analyzed the relationship of adolescents' educational expectations to father's education, occupation, parental educational encouragement, and family size. The results indicated the father's education is a partial determinant of his occupation and hence of the social status of the family; that paternal education and occupation influenced adolescents' educational expectencies through parental encouragement. The larger the family, the greater the reduction in the frequency which the parents encouraged their children to continue education beyond high school.

Results of other studies on the self concept follow. Self concept may be defined, according to Newcomb (1950), as the "individual as perceived by that individual in a socially determined frame of reference (p. 328)." Hodgkins and Stakenas (1967), enlarging on the definition believed that such a definition of self concept emerges through social interaction with significant others. Such an emergence is dependent among other things on: (a) who the individual interacts with; (b) the social situation in which such interaction occurs; and (c) the individual's evaluation of himself in the context of the social situation. They stated further that according to reference group theory it is generally believed the family and peers are more influential in the development of the individual's self concept.

Super, et al (1957) placed the nature of vocational behavior within a developmental framework. He delineated three types of factors which influence vocational behavior and development; role factors, personal factors, and situational factors. Role factors include those imposed by society which involve role expectations, e.g., sex-role identity. Personal factors are those which originate within or are internalized by the individual. Included in these personal factors is the influence of self concept on vocational choice. Super proposed that the self-concept begins to form prior to adolescence, becomes clearer in adolescence, and is translated into occupational terms in adolescence. Thus, the establishment of self-identity is viewed as one of the adolescents most basic developmental tasks in relation to future vocational choice. Situational factors are those which are external to the individual and over which he has no control. Included among these are parental attitudes toward the individual, parental attitudes toward schooling, atmosphere of the home, economic conditions, etc. All of the above have a cumulative effect on influencing the ultimate vocational choice of the adolescent.

In a study of perceptions related to self, home and school among ninth grade students, Wormell (1963) selected one hundred pupils as "high" and "low" utilizers of intellectual abilities on the basis of intelligence and grade point average, and matched them for sex, age, intelligence, and socio-economic status. The low-utilizers were found to perceive relationships within the home and family as less supportive than did high-utilizers. The low-utilizers also perceived their communication with their parents as less useful to themselves.

Ball (1963) investigated the relationship between self concept and the ability, academic achievement, and sex of high school seniors. Bills Index of Adjustment and Values and the School and College Ability Tests were administered to 228 seniors in a single high school. A significant relationship was found to exist between level of achievement and self concept. No significant relationships existed between the main effects and interaction effects of ability, achievement, and sex and the self-acceptance dimension of self concept. Males with high ability had higher self-discrepancy scores than males with low ability.

The relationship between self attitudes, academic achievement, socio-economic status, and intelligence in 229 eighth-grade public school students was studied by Nemeroff (1964). Self-attitude was measured by the Index of Adjustment and Values. The investigator found a significant relationship between self concept and socio-economic status, but no significant relationship between self-acceptance and socio-economic status.

Some of the studies that centered on anxiety are reported since this factor was studied in the project. Studies concerned with the effect of anxiety on the educational or vocational aspirations of youth are limited in number. Small (1953) gave evidence that emotionally well-adjusted individuals were more realistic in their vocational choices. At the conclusion of an intensive interdisciplinary research program into the problem of dropouts, Lichter and co-workers (1962) concluded that emotional problems (not economic ones) were the major causes of school difficulties which result in dropping out, and that the school was only one of many areas of maladjustment.

Cole (1962) suggested that anxiety exists during adolescence when situations arise in which the outcome cannot be reliably predicted because of the adolescent's inexperience. Some of the major categories of anxiety may be: the problem of emancipation from the home, maintenance of social status, educational adjustment, selection of a vocation and problems around sex-role identity (Brown, 1954). Meisener (1961) reported that the major sources of anxiety for the adolescent male are school, sex, unpopularity, immoral activity, religion, vocation, and future life.

Haywood and Doobs (1964) administered a scale similar to the Manifest Anxiety Scale and three other instruments to 50 eleventh and twelfth grade boys at each of two widely different socio-economic levels. There was a significant correlation between manifest anxiety and the avoidance factor on the S-R Inventory of Anxiousness. No difference between students of different socio-economic levels was reported in vocational choices. The authors suggested anxious students characterized by high aviodance motivation would tend to be more influenced by the environmental rather than the self-actualization potentials of a particular occupation.

Chow (1965) investigated the relationship between an individual's anxiety level and the interrelationship among his perceived self, his "reasonably satisfactory" self, and his ideal self. He administered the Children's Form of the Manifest Anxiety Scale and the Bills Index of Adjustment and Values to 247 ninth-grade boys and girls. The results in general indicated that subjects with high self concept scores tended to have a lower level of anxiety than subjects with lower self concept scores.

Holtzman and Moore (1965) reporting the findings of the Texas Youth Study found that the 1,849 Negro subjects in their sample of 12,892 high school students revealed more symptoms of anxiety than the white students. Family tension, problems of personal adjustment, social isolation, and concern over conformity demands of peer groups were significantly greater for Negro students than white students.

Socio-cultural factors were also reviewed and several studies are reported. Taba (1964) in discussing the influence of cultural deprivation on school learning, has noted that the culturally deprived child used to be called retarded, the problem child, the slow learner, the under-achiever. She pointed out that Reissman (1962) has stated that in 1950, 14 large cities had one deprived child in ten, while in 1960 there was one in three. Therefore, it appears that as the percentage of age groups attending school increases, there will be a concomitant increase in attendance of deprived children. The parents of these children generally have low ambition for their young. There is a lack of proper models, and the children lack the skills and habits for meeting conduct demands of the schools. For these children, the school must be supplementary and counteract their social environment if they are to have equal opportunity to learn.

Thornton & Amble (1967) investigated the educational development of culturally deprived students in critical, non-academic areas. Two groups of students from a ninth and tenth grade population were designated as Low and High Achievers. The results provided little support for the hypothesis that after eight years of schooling, disadvantaged children will have incidently acquired favorable attitudes and understanding with reference to child development, activities, and behavior patterns. The findings indicate that culturally disadvantaged students do not sufficiently understand the activities of children nor do they compensate for low scholastic ability by excellence in sports, games, or physical tasks. Children from culturally disadvantaged homes apparently were not culturalized as an incidental outcome of the school program.

Elder (1962) found a considerable degree of interdependence between scholastic motivation and achievement, educational aspirations and occupational aspirations in studying questionnaire responses of approximately 25,000 junior and senior high school students in North Carolina and Ohio. The effects of three interrelated types of independent variables were analyzed as determinants of social mobility among adolescent children: the structure of opportunities, parental values, and adolescent motivation and intelligence. The kinds of opportunities for vertical mobility to which an adolescent was exposed were measured by social class, family size, and ordianal position. Parental values were measured by the father's occupation, the level of parental education, religious affiliation, and educational goals of the parents for the child. The motivation and mental ability of adolescents were reflected by the child-rearing practices, e.g. achievement demands and independence training.

Results indicated that the three basic variables may be ranked in terms of effect on mobility behavior: motivation and ability, parental values, and structure of opportunities. In addition, it was found that neither high paternal nor maternal power in either the marital or parent-adolescent relationship was related to high scholastic motivation. The authors concluded that given the capacity to achieve, the values of parent and child are most crucial in specifying the direction in which the potential for mobility may be expressed. In addition, given the capacity to achieve coupled with high educational and occupational goals, the availability of advancement opportunities may either facilitate, hinder, or frustrate the expression of achievement motivation.

HYPOTHESES

1. Over a three-year period, educational and occupational aspirations of black and white youth are independent of
    a. self concept
    b. anxiety
    c. family adjustment
    d. parents' aspirations

2. Over a three-year period, changes in the educational and occupational aspirations of black and white youth are independent of changes of
    a. self concept
    b. anxiety
    c. family adjustment

3. Over a three-year period, IQ of black and white youth is independent of
    a. educational aspirations
    b. occupational aspirations
    c. self concept
    d. anxiety

4. There will be no significant changes in the self concept of black and white youth over a three-year period from
    a. Grade 8 to Grade 9
    b. Grade 9 to Grade 10
    c. Grade 10 to Grade 11
    d. Grade 11 to Grade 12

5. Black youth will have significantly higher self concepts than white youth over a three-year period in
    a. Grade 8
    b. Grade 9
    c. Grade 10
    d. Grade 11
    e. Grade 12

6. There will be no significant changes in the anxiety of black and white youth over a three-year period from
    a. Grade 8 to Grade 9
    b. Grade 9 to Grade 10
    c. Grade 10 to Grade 11
    d. Grade 11 to Grade 12

7. There will be no significant differences in the anxiety of black and white youth in
    a. Grade 8
    b. Grade 9
    c. Grade 10
    d. Grade 11
    e. Grade 12

8. There will be no significant changes in the family adjustment of black and white youth over a three-year period from
    a. Grade 8 to Grade 9
    b. Grade 9 to Grade 10
    c. Grade 10 to Grade 11
    d. Grade 11 to Grade 12

9. There will be no significant differences in the family adjustment of black and white youth in
    a. Grade 8
    b. Grade 9
    c. Grade 10
    d. Grade 11
    e. Grade 12

PROCEDURE

Sample Selection

Pre-Planning. Prior to sample selection, a subjective evaluation of the general culture in the North Florida region was obtained. State, county, and school personnel who were acquainted with relative levels of economic deprivation in various geographical areas were contacted. Permission was obtained to conduct the study through state and local school officials. Certain schools had been committed to other research projects or would not agree for this project to continue over a three-year period. Some school officials were not willing to give time from the students' studies for the project or were disinterested. Schools finally selected were within a radius of 200 miles of the Florida State University since periodic travel to each school was essential. No schools were selected closer than 25 miles from Tallahassee since students in the vicinity of the University were frequently used in other research.

Description of the Region. The region encompassed ten counties as far east as Lake City, south to Chiefland, and to Cedar Key on the Gulf of Mexico, west to Chipley and to the Alabama state line on the north at Graceville. Much of this rolling country in Florida remains in thick pine forest. Other than the forest industry, there is tobacco farming, limestone mining, a furniture factory in Quincy, an aircraft repair factory in Lake City and some fishing. The primary occupations for families in this region are unskilled jobs and seasonal employment on farms. There are a few semi-skilled, and even fewer skilled jobs available.

The population in these counties ranged from 5,700 in Wakulla County to 43,000 in Gadsden County (1966 Population estimate). Six of the counties where 14 of the schools were located had less than

12,000 population. In 1963 the range of family income extended from a mediam of $2,662 to $3,607 in the eleven counties. The towns are mainly market centers or fishing villages, each with a commercial center bordered by well kept middle-class residential areas. Beyond are districts of unpaved red dirt roads, generally without street lights or street signs.

Most of the public schools had accreditation from both state and the Southern Association of Colleges and Schools. One county had neither form of accreditation for any of its public schools. Four junior colleges and two state universities are within or adjacent to this region. The prescence of local junior colleges has given new support to students' educational aspirations, but the lack of industry in the area limits the absorption of the graduates into the local labor force.

Selection of Subjects. In September of 1965 school personnel in 29 schools were contacted and specific appointments made with principals or guidance counselors. Graduate research assistants went to these schools to administer a Background Information questionnaire to all students in the 8th, 9th, and 10th grades in these schools. The sample used for this project were then selected by use of the McGuire-White Index of Social Status from the subject's score of 52 or higher, designating lower class. Other biographical information obtained from school guidance counselors was used to confirm the sample selected. Discussion of the study was kept at a minimum concerning the use of lower-class subjects in this project. During the next two years, some of the subjects moved from the school district, or became ill, were deceased or withdrew from school. Effort was made to contact those who moved to a school in an adjacent county where the project was also being conducted. Effort was also made for students to answer various questionnaires missed through a special extra session near the end of the school year. School personnel were most helpful and cooperative in planning with the project personnel in order to obtain all possible usable data. Due to the design of the study it was not possible to follow students who were not in one of the 29 cooperating schools.

Initially there were 1425 boys in the study in the fall of 1965 after middle-class boys had been eliminated. By the fall of 1966 there were a total of 1213 evenly distributed as to black and white adolescents. In the fall of the 1967 school year there were 952 boys and in the fall of 1968 there were 890 boys. After all instruments were carefully checked and certain subjects eliminated due to low IQ's the working sample for this study totaled 762 for analyzing the final data.

Data Collection

The nine instruments used in the project are described and attached in the Appendix. Pretesting of these instruments had been completed prior to administration with younger adolescents for suitability and comprehension. Lower-class students of each race who responded for this pretesting, were also interviewed and questioned later regarding their answers. Since this project was a longitudinal study, it was necessary to train the various research assistants for uniformity in administration of instruments. A total of 20 graduate assistants obtained research experience throughout the four-year period that the project was funded. They all were studying at the doctoral level in either child development or family relations and of these 20 there were 13 men and 7 women who received training in administration of instruments, interview techniques, coding, statistical procedures, and computer programming. As instruments were accumulated, they were coded, and data punched on IBM cards. Later, the data were stored on tape and the 6400 computer used for analysis.

Each subject was assigned a code number for the duration of the study and did not place his name on the answer sheets. When collecting data, the research assistants scrutinized answers and kept detailed records. Boys were eliminated from the study who were unable to answer carefully or who maintained a consistent response set. For final decision of who were retained in the sample over the three-year period, only those who had answered all instruments were used in this study. In the Appendix in Table 1 are the names of the 29 schools and the size of the sample from year to year.

Description of Subjects

The subjects used in the project were from the lower-class, were adolescent black and white males, and ranged in age from 13 to 19 the first year of the data collection. They were studied from 8th, 9th, 10th grades the first year into the 9th, 10th, 11th grades the second year, and the third year they were in the 10th, 11th, and 12th grades. A sample of those who graduated in June, 1968 were interviewed recently and material regarding this study is in the Appendix.

From the Background questionnaire a composite of the information obtained is in the Appendix Table 2. Since this information was gathered each year and many family factors did or did not change, this Table gives an over-all view of the sample. This sample in general were composed of intact families (60 to 77%), the majority were middle children (47%), and varied as to number of siblings from none to 18. One-third of the fathers had only a seventh-grade education or less, whereas 28% of the mothers completed the eleventh grade. Fathers were present in 84% of the families and mothers in 93%. The fathers were mainly semi-skilled or skilled workers and 57% of the mothers did not work outside the home.

Analysis of Data

Use of IQ Scores. During the second year of the project, it was found necessary to administer the California Test of Mental Maturity--Short Form to all subjects. A wide variety of achievement scores or lack of scores in school records made it essential to obtain a standard IQ score for each boy. Later, some of the IQ data were eliminated from the study when IQ scores were found to be too low, Kennedy (1969). The range of IQ scores retained in the project was from 142 to 70. The distribution of scores for the final sample of 744 follows:

For black youth with IQ's of 90 and below	292
between 91-115	111
above 115	9
For white youth with IQ's of 90 and below	66
between 91-115	210
above 115	66

Use of Instruments. As discussed in Appendix B, specific questionnaires were used to measure self concept, anxiety, family adjustment, educational, vocational and parental aspirations. Measurement of aspirations follows below:

Educational Aspirations

Low educational aspirations were defined as the intent to graduate from high school with no plans for more education. Those with medium aspirations would be described as planning to graduate from high school, obtain a full-time job and seek further education on a part-time basis. The following goals were included in the high educational aspiration category: plans to attend college full-time and graduate, attend graduate school. Educational aspirations were measured by Herriott's "Your Future Plans" schedule.

Occupational Aspirations

Low occupational aspirations included unskilled and semi-skilled jobs, and established farm laborers. Medium aspirations represented carpenters, electricians, operators of rented property, small contractors, teachers. High aspirations contained the professional jobs, top executives, large land owners. Occupational aspirations were measured by a portion of Herriott's "Your Future Plans" instrument and categories then used from the McGuire-White Index of Social Status.

Parental Aspirations

Low parental aspirations represented a desire for the boy to finish high school. Medium aspirations were designated as attendance at a junior college or trade school. High parental aspirations were described as fulfillment of college requirements, or more. Parental aspirations were measured by the biographical instrument.

Criteria For Determining Changes

The criteria for determining changes from year 1 to year 3 for the various instruments is listed in Appendix D and also the various scoring criteria for determining high and low self concept, anxiety, family adjustment.

Statistical Analysis. In order to make year to year comparisons, a paired t test had to be used, since the samples were not independent. For each comparison, the data were pooled in such a manner that all possible scores for a grade were used, disregarding the year of administration of the instrument. Thus, for a ninth to tenth grade comparison, second year scores for eighth graders and first year scores for ninth graders together were compared with third year scores of eighth graders and second year scores of ninth graders. This pooling of the data resulted in four separate longitudinal comparisons for each race.

To compare between black and white youth, the standard t test for independent samples was used. To avoid confounding differences due to age with differences due to race, five separate comparisons were made, one for each grade level. In this case again, all possible scores for a grade level were pooled. Thus, for the comparison between tenth grade black youth and tenth grade white youth, the entire sample could be used since each year of administration produced a set of tenth grade scores.

To make chi-square comparisons between the various instruments, the sample were again split into six groups in order to control for grade and race. Separate contingency tables were then computed for each group.

RESULTS

> Hypothesis 1a: Over a three-year period, educational and occupational aspirations of black and white youth are independent of self concept.

No significant relationship was found among black youth as to educational and occupational aspirations and self concept.

For white youth the only significant relationship was at the 10th grade the second year of the study between educational aspirations and self concept. See Table 1 and Table 2.

> Hypothesis 1b: Over a three-year period, educational and occupational aspirations of black and white youth are independent of anxiety.

No significant relationship was found for either black or white youth except at one grade level for white boys. At the eighth grade the first year of the study there was a significant relationship between educational aspirations and anxiety. See Table 3 and Table 4.

> Hypothesis 1c: Over a three-year period, educational and occupational aspirations of black and white youth are independent of family adjustment.

For black youth, there was a significant relationship between educational aspirations and family adjustment, only for the eighth grades the first year of the study. Those with low aspirations had high family adjustment, those with medium aspirations had high family adjustment, and the high aspiration group tended toward medium family adjustment. No relationship was found for occupational aspirations and family adjustment. However, there was a significant relationship between occupational aspirations and family adjustment in the 8th grade group the first year of the study. The high occupational aspiration group tended to have high and medium family adjustment scores, the medium group tended towards medium family adjustment scores. See Table 5 and Table 6.

TABLE 1

RELATIONSHIP OF SELF CONCEPT TO EDUCATIONAL ASPIRATIONS IN THREE SUCCESSIVE YEARS BY RACE AND GRADE

Grade	First Year		Second Year		Third Year	
	X^2	p	X^2	p	X^2	p
Black youth						
8th grade	2.2	n.s.	3.9	n.s.	2.1	n.s.
9th grade	4.4	n.s.	2.9	n.s.	1.9	n.s.
10th grade	4.2	n.s.	.27	n.s.	2.4	n.s.
White youth						
8th grade	3.1	n.s.	2.5	n.s.	1.9	n.s.
9th grade	3.9	n.s.	2.6	n.s.	6.2	.05
10th grade	.93	n.s.	6.2	.05	3.0	n.s.

TABLE 2

RELATIONSHIP OF SELF CONCEPT TO OCCUPATIONAL ASPIRATIONS IN THREE SUCCESSIVE YEARS BY RACE AND GRADE

Grade	First Year		Second Year		Third Year	
	X^2	p	X^2	p	X^2	p
Black youth						
8th grade	2.9	n.s.	1.4	n.s.	1.6	n.s.
9th grade	.51	n.s.	.29	n.s.	.54	n.s.
10th grade	2.4	n.s.	2.4	n.s.	1.9	n.s.
White youth						
8th grade	2.1	n.s.	.15	n.s.	1.1	n.s.
9th grade	1.9	n.s.	.09	n.s.	1.0	n.s.
10th grade	2.7	n.s.	3.3	n.s.	6.4	n.s.

TABLE 3

RELATIONSHIP OF ANXIETY TO EDUCATIONAL ASPIRATIONS IN THREE SUCCESSIVE YEARS BY RACE AND GRADE

Grade	First Year		Second Year		Third Year	
	X^2	p	X^2	p	X^2	p
Black youth						
8th grade	.83	n.s.	2.4	n.s.	.06	n.s.
9th grade	.78	n.s.	1.5	n.s.	5.7	n.s.
10th grade	.05	n.s.	2.2	n.s.	.58	n.s.
White youth						
8th grade	6.1	.05	3.3	n.s.	1.0	n.s.
9th grade	.09	n.s.	2.5	n.s.	2.2	n.s.
10th grade	.66	n.s.	.55	n.s.	.07	n.s.

TABLE 4

RELATIONSHIP OF ANXIETY TO OCCUPATIONAL ASPIRATIONS IN THREE SUCCESSIVE YEARS BY RACE AND GRADE

Grade	First Year		Second Year		Third Year	
	X^2	p	X^2	p	X^2	p
Black youth						
8th grade	.90	n.s.	.67	n.s.	2.7	n.s.
9th grade	3.4	n.s.	1.3	n.s.	2.7	n.s.
10th grade	.37	n.s.	.26	n.s.	2.2	n.s.
White youth						
8th grade	2.3	n.s.	1.8	n.s.	4.1	n.s.
9th grade	.90	n.s.	.72	n.s.	2.4	n.s.
10th grade	.43	n.s.	1.8	n.s.	2.5	n.s.

TABLE 5

RELATIONSHIP OF FAMILY ADJUSTMENT TO EDUCATIONAL ASPIRATIONS IN THREE SUCCESSIVE YEARS BY RACE AND GRADE

Grade	First Year		Second Year		Third Year	
	X^2	p	X^2	p	X^2	p
Black youth						
8th grade	10.24	.01	.64	n.s.	1.79	n.s.
9th grade	.41	n.s.	.70	n.s.	.35	n.s.
10th grade	2.57	n.s.	.03	n.s.	.83	n.s.
White youth						
8th grade	5.15	n.s.	6.44	n.s.	5.14	n.s.
9th grade	.64	n.s.	3.32	n.s.	3.23	n.s.
10th grade	.20	n.s.	2.33	n.s.	.88	n.s.

TABLE 6

RELATIONSHIP OF FAMILY ADJUSTMENT TO OCCUPATIONAL ASPIRATIONS IN THREE SUCCESSIVE YEARS BY RACE AND BRADE

Grade	First Year		Second Year		Third Year	
	X^2	p	X^2	p	X^2	p
Black youth						
8th grade	3.62	n.s.	.00	n.s.	2.00	n.s.
9th grade	8.47	n.s.	2.32	n.s.	.47	n.s.
10th grade	.54	n.s.	.89	n.s.	2.48	n.s.
White youth						
8th grade	10.08	.05	3.67	n.s.	2.92	n.s.
9th grade	.79	n.s.	.15	n.s.	1.90	n.s.
10th grade	2.25	n.s.	1.37	n.s.	.22	n.s.

Hypothesis 1d: Over a three-year period, educational and occupational aspirations of black and white youth are independent of parents' aspirations.

For black youth, see Table 7, there was a significant relationship in educational aspirations in the 8th grade group as they progressed into the 9th and on into the 10th grade the third year of the study. High educational aspirations were associated with high parental aspirations. For those that began in the 9th grade, in the study, there was a significant relationship for their second and third years when they were in the 10th and 11th grades for they had high educational and high parental aspirations. For the 10th graders the first year they were in the study, they also had high educational and high parental aspirations.

For white youth, there was a significant relationship at the 8th grade and for the next two years this group was in the study, with high educational aspirations related to high parental aspirations, low educational aspirations related to low parental aspirations. This was true for all three years beginning at grade 9 and also for the first year in grade 10. See Table 7 below.

TABLE 7

RELATIONSHIP OF PARENT ASPIRATIONS FOR BOYS AND EDUCATIONAL ASPIRATIONS IN THREE SUCCESSIVE YEARS BY RACE AND BY GRADE

Grade	First Year		Second Year		Third Year	
	X^2	p	X^2	p	X^2	p
Black youth						
8th grade	12.4	.02	13.4	.01	12.3	.02
9th grade	7.4	n.s.	18.1	.01	13.3	.01
10th grade	12.2	.02	9.2	n.s.	2.4	n.s.
White youth						
8th grade	42.8	.001	34.2	.001	21.9	.001
9th grade	42.6	.001	28.9	.001	25.2	.001
10th grade	13.9	.01	6.5	n.s.	3.8	n.s.

For black youth, there was a significant relationship between parent aspirations and occupational aspirations for the first year of the study for both the 9th and 10th grades.

For white youth, there was a significant relationship for the boys in the second year of the study who had been in the 8th and were then in the 9th grade. There was a significant relationship for the 9th grade boys who were in the 3rd year of the study, thus answered as 12th graders. See Table 8 below.

TABLE 8

RELATIONSHIP OF PARENT ASPIRATIONS FOR BOYS AND OCCUPATIONAL ASPIRATIONS IN THREE SUCCESSIVE YEARS BY RACE AND GRADE

Grade	First Year		Second Year		Third Year	
	X^2	p	X^2	p	X^2	p
Black youth						
8th grade	8.9	n.s.	7.2	n.s.	7.7	n.s.
9th grade	12.0	.02	7.9	n.s.	1.5	n.s.
10th grade	13.4	.01	.90	n.s.	.76	n.s.
White youth						
8th grade	3.5	n.s.	14.9	.01	6.3	n.s.
9th grade	5.8	n.s.	6.7	n.s.	11.2	.05
10th grade	5.4	n.s.	9.0	n.s.	6.5	n.s.

Hypothesis 2a: Over a three-year period, changes in the educational and occupational aspirations of black and white youth are independent of changes of their self concept.

For black youth, there was a significant relationship between changes in scores in educational aspirations and self concept. As educational aspirations increased, so did self concept but the larger proportion of black youth remained stable, neither increasing nor decreasing. See Table 9.

For white youth, there was no significant relationship as shown in Table 10.

TABLE 9

CHANGES IN EDUCATIONAL ASPIRATIONS OF BLACK YOUTH WITH CHANGES IN SELF CONCEPT (BILLS)

SELF CONCEPT*	EDUCATIONAL ASPIRATIONS CHANGES			
	Increased	Stable	Decreased	Total
Increased	30	9	26	65
Stable	54	28	108	190
Decreased	8	10	35	53
Total	92	47	169	308

X^2 = 52.741 p .001
*Range self concept 35-105

TABLE 10

CHANGES IN EDUCATIONAL ASPIRATIONS OF WHITE YOUTH WITH CHANGES IN SELF CONCEPT (BILLS)

SELF CONCEPT*	EDUCATIONAL ASPIRATIONS CHANGES			
	Increased	Stable	Decreased	Total
Increased	20	21	56	97
Stable	23	44	57	124
Decreased	22	25	30	77
Total	65	90	143	298

X^2 = 9.238 n.s.
*Range self concept 35-105

TABLE 11

CHANGES IN OCCUPATIONAL ASPIRATIONS OF BLACK YOUTH WITH CHANGES IN SELF CONCEPT (BILLS)

SELF CONCEPT*	OCCUPATIONAL ASPIRATIONS CHANGES Increased	Stable	Decreased	Total
Increased	13	30	16	59
Stable	32	112	34	178
Decreased	12	28	9	49
Total	57	170	59	286

$X^2 = 3.655$ n.s.
*Range self concept 35-105

TABLE 12

CHANGES IN OCCUPATIONAL ASPIRATIONS OF WHITE YOUTH WITH CHANGES IN SELF CONCEPT (BILLS)

SELF CONCEPT*	OCCUPATIONAL ASPIRATIONS CHANGES Increased	Stable	Decreased	Total
Increased	10	46	15	71
Stable	37	95	27	159
Decreased	16	26	14	56
Total	63	167	56	286

$X^2 = 6.628$ n.s.
*Range self concept 35-105

For both black and white boys, there were no significant relationships between changes in scores in occupational aspirations and self concept. See Tables 11 and 12.

Hypothesis 2b: Over a three-year period, changes in the educational and occupational aspirations of black and white youth are independent of changes of their anxiety.

There was no significant relationship for black youth. However, for white youth there was a significant relationship. As educational aspirations increased, changes in anxiety decreased. The larger proportion whose changes were increasing in educational aspirations were remaining stable in anxiety. See Tables 13 and 14.

Table 15 shows that there was no significant relationship for black youth as to changes in occupational aspirations with changes in anxiety scores.

However, in Table 16 for white youth there was a significant relationship between changes in scores in occupational aspirations with changes in anxiety scores. The larger proportion remained stable on both occupational aspirations and anxiety scores.

TABLE 13

CHANGES IN EDUCATIONAL ASPIRATION OF BLACK YOUTH WITH CHANGES IN ANXIETY SCORES

ANXIETY* CHANGES	EDUCATIONAL ASPIRATION CHANGES Increased	Stable	Decreased	Total
Increased	13	7	16	36
Stable	48	29	77	154
Decreased	23	20	35	78
Total	84	56	128	268

$X^2 = 1.921$ n.s.
*Range anxiety 0-49

TABLE 14

CHANGES IN EDUCATIONAL ASPIRATION OF WHITE YOUTH WITH CHANGES IN ANXIETY SCORES

ANXIETY* CHANGES	EDUCATIONAL ASPIRATION CHANGES Increased	Stable	Decreased	Total
Increased	16	14	8	38
Stable	61	40	15	116
Decreased	37	37	35	109
Total	114	91	58	263

$X^2 = 22.432$ p .001
*Range anxiety 0-49

TABLE 15

CHANGES IN OCCUPATIONAL ASPIRATIONS OF BLACK YOUTH WITH CHANGES IN ANXIETY SCORES

ANXIETY* CHANGES	OCCUPATIONAL ASPIRATION CHANGES Increased	Stable	Decreased	Total
Increased	11	26	13	50
Stable	37	120	32	189
Decreased	20	58	25	103
Total	68	204	70	342

$X^2 = 3.197$ n.s.
*Range anxiety 0-49

TABLE 16

CHANGES IN OCCUPATIONAL ASPIRATIONS OF WHITE YOUTH WITH CHANGES IN ANXIETY SCORES

ANXIETY* CHANGES	OCCUPATIONAL ASPIRATION CHANGES Increased	Stable	Decreased	Total
Increased	14	24	7	45
Stable	26	88	25	139
Decreased	27	72	24	123
Total	67	184	56	307

$X^2 = 21.408$ p .001
*Range anxiety 0-49

TABLE 17

CHANGES IN EDUCATIONAL ASPIRATIONS OF BLACK YOUTH WITH CHANGES IN FAMILY ADJUSTMENT SCORES

FAMILY ADJUSTMENT*	EDUCATIONAL ASPIRATIONS CHANGES Increased	 Stable	 Decreased	 Total
Increased	35	23	74	132
Stable	50	25	113	188
Decreased	32	17	42	91
Total	117	65	229	411

X^2 = 5.385 n.s.
*Family adjustment range 114-570

TABLE 18

CHANGES IN EDUCATIONAL ASPIRATIONS OF WHITE YOUTH WITH CHANGES IN FAMILY ADJUSTMENT SCORES

FAMILY ADJUSTMENT*	EDUCATIONAL ASPIRATIONS CHANGES Increased	 Stable	 Decreased	 Total
Increased	15	20	28	63
Stable	30	45	79	154
Decreased	33	36	68	136
Total	78	101	175	354

X^2 = 1.733 n.s.
*Family adjustment range 114-570

> Hypothesis 2c: Over a three-year period, changes in the educational aspirations of black and white youth are independent of changes of their family adjustment.

As shown in Tables 17 and 18, there was no significant relationship for either black or white youth in changes in educational aspirations with changes in family adjustment scores.

TABLE 19

CHANGES IN OCCUPATIONAL ASPIRATIONS OF BLACK YOUTH WITH CHANGES IN FAMILY ADJUSTMENT SCORES

FAMILY ADJUSTMENT*	OCCUPATIONAL ASPIRATIONS CHANGES			
	Increased	Stable	Decreased	Total
Increased	27	69	27	123
Stable	38	114	31	183
Decreased	12	51	18	81
Total	77	234	76	387

X^2 = 3.245 n.s.
*Family adjustment range 114-570

TABLE 20

CHANGES IN OCCUPATIONAL ASPIRATIONS OF WHITE YOUTH WITH CHANGES IN FAMILY ADJUSTMENT SCORES

FAMILY ADJUSTMENT*	OCCUPATIONAL ASPIRATIONS CHANGES			
	Increased	Stable	Decreased	Total
Increased	16	32	6	54
Stable	27	96	27	150
Decreased	35	66	25	126
Total	78	194	58	330

X^2 = 7.020 n.s.
*Family adjustment range 114-570

As shown in Tables 19 and 20, there was no significant relationship for either balck or white youth in changes in occupational aspirations with changes in family adjustment scores.

Hypothesis 3a: Over a three-year period, IQ of black youth and white youth is independent of educational aspirations.

For black youth, in the 8th grade for the first year and third year of the study there was a significant relationship between IQ and educational aspirations. Among the high IQ group, the largest proportion were in the high aspiration group. For white youth, this trend also took place, the high IQ group also had high educational aspirations. This was true at each grade level, for the low IQ group had low aspirations. The medium IQ group had either low or medium educational aspirations, while the high IQ group had high aspirations. Table 21 shows that only the second year of the study were there no significant relationships.

TABLE 21

RELATIONSHIP OF IQ TO EDUCATIONAL ASPIRATIONS IN THREE SUCCESSIVE YEARS BY RACE AND GRADE

Grade	First Year		Second Year		Third Year	
	X^2	p	X^2	p	X^2	p
Black youth						
8th grade	9.72	.05	4.47	n.s.	10.29	.05
9th grade	3.41	n.s.	5.43	n.s.	6.79	n.s.
10th grade	0.0	n.s.	0.0	n.s.	0.0	n.s.
White youth						
8th grade	14.5	.01	7.86	n.s.	7.91	n.s.
9th grade	10.9	.05	7.63	n.s.	11.4	.05
10th grade	23.8	.001	6.70	n.s.	14.3	.01

Hypothesis 3b: Over a three-year period, IQ of black youth and white youth is independent of occupational aspirations.

For black youth as shown in Table 22, there was a significant relationship for the 9th graders as they progressed into the 10th and 11th grades. When the white 8th graders became 9th graders there was also a significant relationship.

TABLE 22

RELATIONSHIP OF IQ TO OCCUPATIONAL ASPIRATIONS IN THREE SUCCESSIVE YEARS BY RACE AND GRADE

Grade	First Year		Second Year		Third Year	
	X^2	p	X^2	p	X^2	p
Black youth						
8th grade	7.61	n.s.	7.49	n.s.	7.18	n.s.
9th grade	.64	n.s.	9.60	.05	10.10	.05
10th grade	0.0	n.s.	0.0	n.s.	0.0	n.s.
White youth						
8th grade	4.82	n.s.	10.45	.05	4.49	n.s.
9th grade	8.56	n.s.	5.42	n.s.	6.02	n.s.
10th grade	3.10	n.s.	6.43	n.s.	8.50	n.s.

TABLE 23

RELATIONSHIP OF IQ TO SELF CONCEPT IN THREE SUCCESSIVE YEARS BY RACE AND GRADE

Grade	First Year		Second Year		Third Year	
	X^2	p	X^2	p	X^2	p
Black youth						
8th grade	.47	n.s.	8.79	n.s.	1.54	n.s.
9th grade	1.63	n.s.	3.10	n.s.	.77	n.s.
10th grade	0.0	n.s.	0.0	n.s.	0.0	n.s.
White youth						
8th grade	1.22	n.s.	.30	n.s.	6.37	n.s.
9th grade	3.56	n.s.	7.66	n.s.	.98	n.s.
10th grade	.90	n.s.	.24	n.s.	3.89	n.s.

TABLE 24

RELATIONSHIP OF IQ TO ANXIETY IN THREE SUCCESSIVE YEARS BY RACE AND GRADE

Grade	First Year		Second Year		Third Year	
	X^2	p	X^2	p	X^2	p
Black youth						
8th grade	.48	n.s.	2.08	n.s.	3.84	n.s.
9th grade	8.48	n.s.	2.55	n.s.	5.45	n.s.
10th grade	2.40	n.s.	1.33	n.s.	0.0	n.s.
White youth						
8th grade	.44	n.s.	1.40	n.s.	.58	n.s.
9th grade	6.13	n.s.	4.44	n.s.	5.35	n.s.
10th grade	3.77	n.s.	.45	n.s.	.20	n.s.

Hypothesis 3c: Over a three-year period, IQ of black youth and white youth is independent of self concept.

As shown in Tables 23 and 24 there was no significant relationship.

Hypothesis 4: There will be no significnat changes in the self concept of black and white youth over a three-year period from

a. Grade 8 to Grade 9
b. Grade 9 to Grade 10
c. Grade 10 to Grade 11
d. Grade 11 to Grade 12

Table 25 refers to whether scores changed from grade 8 to 9, from 9 to 10 or from one year to the next as the boys developed. There were no significant changes except for the black youth whose self concept scores showed a change from grade 9 to 10.

Hypothesis 5: Black youth will have significantly higher self concepts than white youth over a three-year period in

a. Grade 8
b. Grade 9
c. Grade 10
d. Grade 11
e. Grade 12

As Table 26 reveals, there were significant changes between black and white boys self concepts both at Grade 9 and Grade 12, with black youth having higher scores.

TABLE 25

THE DEVELOPMENT OF SELF CONCEPT IN BLACK AND WHITE ADOLESCENT MALES FROM GRADE 8 TO GRADE 12

BLACK					WHITE				
N	Grade	Mean	t	df	N	Grade	Mean	t	df
87	8	90	-1.52	86	96	8	90	-1.329	95
87	9	92	n.s.		96	9	92	n.s.	
191	9	92	2.178	190	193	9	90	-1.593	192
191	10	91	p .05			10	91	n.s.	
190	10	92	.795	189	173	10	90	.363	172
190	11	91	n.s.		173	11	89	n.s.	
86	11	92	-1.842	85	76	11	88	- .366	75
86	12	94	n.s.		76	12	89	n.s.	

TABLE 26

A COMPARISON OF BLACK AND WHITE ADOLESCENT MALES' SCORES ON SELF CONCEPT FROM GRADE 8 THROUGH GRADE 12

BLACK					WHITE				
N	Grade	Mean	t	df	N	Grade	Mean	t	df
87	8	90	.067	173	96	8	90	n.s.	
191	9	92	2.57	362	193	9	90	p .02	
277	10	92	1.699	534	269	10	90	n.s.	
190	11	91	1.619	357	173	11	90	n.s.	
86	12	94	4.208	150	76	12	89	p .001	

Hypothesis 6: There will be no significant changes in the anxiety of black and white youth over a three-year period from

- a. Grade 8 to Grade 9
- b. Grade 9 to Grade 10
- c. Grade 10 to Grade 11
- d. Grade 11 to Grade 12

For black youth there were significant changes in anxiety. It was significantly lower in the 9th grade than in the 8th grade, and significantly lower in the 11th grade than in the 10th grade. As these boys grew older, they were less anxious.

For white youth, the only significant change was less anxiety in the 9th grade boys. See Table 27.

Hypothesis 7: There will be no significant differences in the anxiety of black and white youth in

- a. Grade 8
- b. Grade 9
- c. Grade 10
- d. Grade 11
- e. Grade 12

As shown in Table 28, the black youth had higher anxiety than white. There was a significant difference between the two groups at all grade levels except the 12th. See Table 28.

TABLE 27

ANXIETY DEVELOPMENT IN BLACK AND WHITE ADOLESCENT MALES FROM GRADE 8 TO GRADE 12

BLACK					WHITE				
N	Grade	Mean	t	df	N	Grade	Mean	t	df
127	8	18	2.66	126		8	17	5.54	106
127	9	17	p .02			9	13	p .001	
264	9	17	1.172	263	223	9	15	1.85	222
264	10	16			223	10	14	n.s.	
235	10	17	2.844	234	192	10	15	.994	191
235	11	16	p .01		192	11	14	n.s.	
98	11	16	.893	97	76	11	15	.720	75
98	12	15	n.s.		76	12	14	n.s.	

TABLE 28

A COMPARISON OF BLACK AND WHITE ADOLESCENT MALES' SCORES ON ANXIETY DEVELOPMENT FROM GRADE 8 THROUGH GRADE 12

BLACK					WHITE				
N	Grade	Mean	t	df	N	Grade	Mean	t	df
127	8	18	1.751	202	107	8	17	p .05	
264	9	17	3.796	458	223	9	15	p .001	
362	10	16	3.97	620	299	10	14	p .001	
235	11	16	2.435	404	192	11	14	p .02	
98	12	15	.566	161	76	12	14	n.s.	

Hypothesis 8: There will be no significant changes in the family adjustment of black and white youth over a three-year period from

- a. Grade 8 to Grade 9
- b. Grade 9 to Grade 10
- c. Grade 10 to Grade 11
- d. Grade 11 to Grade 12

There were no significant changes from year to year for either black or white youth. The mean scores for each grade level for both groups were all within the "homey" range. See Table 29.

Hypothesis 9: There will be no significant differences in the family adjustment of black and white youth in

- a. Grade 8
- b. Grade 9
- c. Grade 10
- d. Grade 11
- e. Grade 12

In all grade levels except the 12th, the white group were significantly more "homey" than the black group. See Table 30.

A general descriptive summary table is included of ranges of scores on page 37. See Table 31.

TABLE 29

THE DEVELOPMENT OF FAMILY ADJUSTMENT IN BLACK AND WHITE ADOLESCENT MALES FROM GRADE 8 TO GRADE 12

BLACK					WHITE				
N	Grade	Mean	t	df	N	Grade	Mean	t	df
114	8	263	.127		94	8	235	.006	
114	9	262	n.s.		94	9	235	n.s.	
246	9	257	-1.492		199	9	235	.908	
246	10	265	n.s.		199	10	231	n.s.	
233	10	262	.530		184	10	231	.013	
233	11	259	n.s.		184	11	231	n.s.	
101	11	253	1.638		79	11	229	-1.134	
101	12	242	n.s.		79	12	240	n.s.	

TABLE 30

A COMPARISON OF BLACK AND WHITE ADOLESCENT MALES' SCORES ON FAMILY ADJUSTMENT FROM GRADE 8 THROUGH GRADE 12

BLACK					WHITE				
N	Grade	Mean	t	df	N	Grade	Mean	t	df
114	8	263	2.684		94	8	235	s=.01	
247	9	257	3.278		200	9	235	s=.01	
348	10	262	4.514		279	10	235	s=.001	
234	11	259	3.895		185	11	231	s=.001	
102	12	242	.216		80	12	240	n.s.	

TABLE 31

CRITERIA FOR DETERMINING CHANGES BETWEEN YEAR 1 AND YEAR 3

Range	Year 1		Year 2		Year 3		Total	
	N	%	N	%	N	%	N	%
Ranges Of Self Concept Scores For Black Males								
Low 35-88	96	28	107	30	105	30	308	50
High 89-105	253	72	255	70	245	70	753	50
Ranges Of Self Concept Scores For White Males								
Low 35-88	131	41	115	37	108	36	354	38
High 89-105	190	59	197	63	185	64	572	62
Ranges Of Anxiety Scores For Black Males								
Low 0-13	126	31	155	38	194	47	475	38
High 14-49	286	69	257	62	218	53	761	62
Ranges Of Anxiety Scores For White Males								
Low 0-13	134	39	189	52	188	55	511	50
High 14-49	208	61	153	48	154	45	515	50
Ranges Of FAT Scores For Black Males								
Homey-High 114-286	276	72	257	67	278	72	811	70
Homeless-Poor 287-571	110	28	127	33	108	28	345	30
Ranges of FAT Scores For Black Males								
Homey-High 114-286	254	80	269	86	257	80	780	82
Homeless-Poor 287-571	64	20	45	14	67	20	176	18

CONCLUSIONS

The boys in the study showed definite developmental trends year by year as they grew older. The white boys had high self concepts and these increased with age. The black youth also had high self concepts and they were consistently higher than the white youth. In anxiety white boys had high anxiety the first year but as age increased, anxiety decreased. The black youth were highly anxious as young adolescents and decreased very slightly as age increased. They were consistently more anxious than white youth. In family adjustment both white and black youth were "homey" or had good family adjustment scores. White boys were more "homey" than black youth but then, black youth were "homey" as well.

In the relationship between educational aspirations and IQ, the trend for white boys with high IQ's was to have high educational aspirations. In general, the low IQ white males also had low educational aspirations.

For black males, the larger proportion of those with low IQ's had high educational aspirations, and the high IQ boys had high educational aspirations. The low IQ black males continued the entire three years to have high educational aspirations. For example, of those below 90 IQ in the 8th grade, 55% had high educational aspirations as compared to the 20% with low aspirations. In the 9th grade of the low IQ group, 56% had high aspirations as to 19% with low aspirations. In the 10th grade of the low IQ group 32% had high and 9% low aspirations. The data revealed there was a trend toward more realism with increase in age.

In respect to occupational aspirations, the black males in the low IQ's had medium or low occupational aspirations as did the high IQ group. For white males the low IQ group tended toward low occupational aspirations and the high IQ group tended toward medium occupational aspirations.

It was found that black youth with high parental aspirations also had high educational and occupational aspirations and the low parental aspirations were related to their low educational and occupational aspirations. For white youth there was a very consistent and strong trend through the 3 years with low parent aspirations related to low educational and occupational aspirations; high parental aspirations related to high educational and occupational aspirations.

In conclusion, the large proportion of white youth in grades 8, 9, 10 may be characterized by medium range IQ and no clear direction between high and low aspirations. In grades 11 and 12, medium IQ and high educational aspirations is the clear trend. With occupational aspirations the consistent direction of the large proportion of white youth is medium IQ and medium aspirations.

APPENDICES

REFERENCES

Ball, R. L. The testing of selected hypotheses concerning the self concept as it relates to the ability, academic achievement, and sex of high school seniors. Unpublished Ed.D. Dissertation, The Florida State University, 1963.

Brown, R. L. These high school fears and satisfactions. Understanding The Child, 1954, 23, 74-76.

Burchinal, Lee G. Differences in educational and occupational aspirations of farm, small-town, and city boys. Rural Sociology, 1961, 26, 107-121.

Chow, K.L. The relationship between anxiety and the self structure. (Doctoral dissertation, Michigan State University). Ann Arbor, Michigan: University Microfilms, 1965, No. 56-8375.

Cole, Luella. Psychology of adolescence. New York: Holt, Rinehart, and Winston, 1962.

Elder, G.H. Adolescent achievement and mobility aspirations. Chapel Hill, N. C.: Institute for Research and Social Science, University of North Carolina, 1962.

Haywood, H. C. & Doobs, Virginia. Motivation and anxiety in high school boys. Journal of Personality, 1964, 32, 371-379.

Henderson, G. From rags to rags--probable effect of poverty on aspirations. The Teachers College Journal, 1966, 3, 103-109.

Hodgkins, B. J. & Stakenas, R. G. The segregated Negro and self-concept: A disparate finding. Unpublished manuscript, The Florida State University, 1967.

Holtzman, W. H. & Moore, Bernice M. Tomorrow's parents. Austin: University of Texas Press, 1965.

Kennedy, W. A. A follow-up normative study of Negro intelligence and achievement. Monograph of the Society for Research in Child Development, 1969, 34.

Lichter, S.D., Ragien, Elsie B., Seibert, F. M., & Skalansky, M.A. The drop-outs. New York: Free Press of Glencoe, 1962.

Meisner, S. J. Some indications of sources of anxiety in adolescent boys. Journal of Genetic Psychology, 1961, 99, 65-73.

Middleton, R. & Grigg, C.M. Rural-urban differences in aspirations. Rural Sociology, 1959, 24, 347-354.

Mowsesian, R., Heath, B. R., & Rothney, J. W. Superior students' occupational preferences and their fathers' occupations. *Personnel and Guidance Journal*, 1966, *45*, 238-243.

Nemeroff, D. The relationship between self-attitudes, academic achievement, socio-economic status, and intelligence in eighth grade public school children. Unpublished Ph.D. Dissertation, New York University, 1964.

Newcomb, T. M. *Social psychology*. New York: Holt, Rinehart, and Winston, 1950.

Rehberg, R. A. & Westby, D. L. Parental encouragement, occupation, education and family size: Artifactual or independent determinants of adolescent educational expectations. *Social Forces*, 1967, *45*, 362-374.

Reissman, F. The culturally deprived child: A new view. *Education Digest*, 1963, *29*, 12-15.

Small, L. Personality determinants of vocational choice. *Psychological Monographs: General and Applied*, 1953, *47*, No. 35.

Super, D. E., Kowalski, Ruth S., & Gotkin, Elizabeth H. Floundering and trial after high school. *Career Pattern Study: Monograph IV, Teacher's College, Columbia University*, 1967.

Taba, Hilda. Cultural deprivation as a factor in school learning. *Merrill Palmer Quarterly*, 1964, *10*, 147-159.

Thornton, S. M. & Amble, B. R. Achievement of disadvantaged children in critical, non-academic areas. *Journal of Educational Research*, 1967, *61*, 124-226.

Wormell, Helen E. A comparative study of perceptions related to self, home, and school among selected ninth grade students. Unpublished Ph.D. Dissertation, The University of Michigan, 1963.

Woronoff, Verall. Negro male identification problems and the educative process. *Journal of Educational Sociology*, 1962, *36*, 30-32.

U. S. Department of Commerce, Bureau of Census, Population Estimates, Series P-25, No. 401, August, 1968.

DISCUSSION OF INSTRUMENTS

The 9 instruments used in this project are included here as well as specific details regarding the development of these instruments, and the validity and reliability of each. A tenth instrument included here was used as an interview schedule the fourth year of the project with a sample of the seniors who completed high school. All of the 9 instruments were administered two at a time at spaced intervals throughout the school year. The students answered these same check lists the second and third years at these same periodic intervals.

The Background Information Sheet was designed for this project to give pertinent data for understanding the family background of the subjects. Prior to administration, it was pretested on other youth who were either a year or two years younger than the eighth graders in the sample. Two instruments that measure self concept were given to the students, each at a different time schedule. These were Brownfain's (1952) self-rating instrument on evaluating the stability of the self concept and Bills' Index of Adjustment and Values (1951). When analyzing the data, it was found that these two measures gave essentially the same information on self concept. The subjects who were high on one instrument in self concept were high on the other. It was decided to analyze the data for this project using Bills' Index since more information was available as to its reliability with this age group. A discussion of each instrument follows. Note that the name of each instrument has been included at the top of each one for this Final Report but was omitted when administered to the subjects. Permission was obtained from authors to utilize the instruments in the project.

Herriott's "Your Future Plans"

This instrument was used to study the educational and vocational aspirations of the subjects. The instrument was revised from a precoded questionnaire used by Herriott (1963). It was originally designed to test three hypotheses related to the influence of significant others and self assessment on educational aspirations. It was administered by Herriott to 1,489 adolescents in one public high school in western Massachusetts. For use with the present sample of economically deprived adolescents a number of changes in word usage and form were made. The original instrument included a description of eight future educational plans. To this, questions designed to assess the vocational aspirations of the subjects of this study were added by the Director of the present project.

Bills' Index of Adjustment and Values (Junior High School Form)

The Junior High School Form of the Index of Adjustment and Values was developed by Bills, Vance, and McLean (Bills, Manual of Instructions, n.d.). The method of construction of the Index consisted of visiting public school classrooms and asking approximately 850 children in grades one through eleven such questions as: "What do you like most about yourself?" and "What is the one word you think of when I say 'mother,' 'father,' 'teacher,' and 'principal'?" The responses from grades one and two were not useful and were omitted. From the words thus compiled, three lists were selected for initial trial in an Index. The selected words were the most frequently given personal attributes. The form for grades 6, 7, and 8 was later revised for form, and, on the basis of item analysis, for stimulus words.

Of primary interest to the investigator using the Junior High Form is the three sub-columns under the heading "The way I feel about being as I am." The ratings are on a three point scale, with each check mark under "I like it," being scored three points, each check mark under "I neither like not dislike it" being scored two points, and each check mark under "I dislike it" being scored one point. The three sub-column totals are then added together to give the total Column II score. Scores range from a possible low of 35 to a possible high of 175.

The Junior High School Index is an instrument of high reliability although the coefficients are slightly smaller than those for the High School Index. These differences are possibly a function of the greater maturity of students in grades six through eight, and may not be a reflection of the instrument. If this is true, the coefficients of reliability of the Junior High School Form, when it is used with gr grades eight, nine, and ten, should approximate those of the High School Form. Bills (Manual of Instructions, n.d.) reported a corrected split-half reliability of the "Self" form of the Junior High Index of .74 for Column I, .90 for Column II, and .87 for Column III. These coefficients were computed on the basis of responses of 154 sixth-, seventh-, and eighth-grade students. Based on 173 students in grades six, seve, and eight, Bills reported a test-retest reliability of .70 for Column I, .82 for Column II, and .57 for Column III. The test-retest covered a period of six weeks.

A relatively small amount of work has been done to establish the validity of the Junior High School Index. Bills (Manual of Instructions, n.d.) considered the most important factor regarding content validity to be the method which was used to obtain the trait words. All words were derived from children at appropriate grade levels, and are words used by the children to describe themselves and other people. In addition, as a result of item analysis each list has undergone revision so that the list represents reliable ways in which children describe themselves and other people.

According to Wylie (1961) inferences regarding the construct validity of Bills scores for measuring phenomenal self-regard may be drawn from the following observations:

(1) In Bills' work with the Index of Adjustment and Values, testing conditions and the stressing of the importance of honesty were assumed to induce frank reports.

(2) Intercorrelations among scores purporting to measure the same construct, or aspects of the same construct, were obtained by various investigators. Bills found that the correlation between self scores and self-acceptance scores was +.90. This implies that these two indices do not have discriminant validity for inferring differing aspects of self-regard, but must be measuring essentially the same construct.

More detailed information regarding the method of construction of the Index of Adjustment and Values is available in the *Manual of Instructions* (Bills, n.d.). Two types of normative data are also provided.

Taylor Manifest Anxiety Scale

The Taylor Manifest Anxiety Scale was used for assessing the level of anxiety of the subjects. This manifest anxiety scale was originally constructed by Taylor (1953) for use in studying eyelid conditioning.

> Approximately 200 items from the Minnesota Multiphasic Personality Inventory were submitted to five clinicians, along with a definition of manifest anxiety that followed Cameron's description of chronic anxiety reactions. The judges were asked to designate the items indicative of manifest anxiety according to the definition. Sixty-five items on which there was 80 per cent agreement or better were selected for the anxiety scale. These 65 statements, supplemented by 135 additional 'buffer' items uniformly classified by the judges as non-indicative of anxiety, were administered in group form to 352 students in a course in introductory psychology. The measures ranged from a low anxiety score of one to a high score of 36, with a median of approximately 14. The form of the distribution was slightly skewed in the direction of high anxiety (p. 285).

Following this initial use, the scale underwent a number of modifications. The original 65 items were reduced to 50 by eliminating those which did not correlate highly with the total anxiety scores in the original test. The buffer items changed so that the test would include most of the items from the L, K, and F scales of the MMPI and 41 items that represent a rigidity scale developed by Wesley (1950).

Elias' Family Adjustment Test (FAT)

This instrument was developed by Elias (1952) and also called The Elias Family Opinion Survey. It was used to measure the quality of intrafamily relations. Elias developed the instrument to measure the presence of "homey" or "homeless" feelings among individuals. The findings have confirmed the unusual predictive ability of the test (Elias, Manual; Cardner, 1951; and Richmond, 1950). A corrected split-half reliability of the final FAT was found to be .97, based on a population of 168 subjects consisting of Long Island University students of general psychology and juvenile delinquents at the Cedar Knolls School for juvenile delinquents and the Elmira State Prison. Scores ranged from 138 to 404 (Elias, Manual).

Validation was provided for the FAT by contrasted groups. The test was given to 123 homeless individuals in The Cedar Knolls School and in Elmira State Prison in New York. Case histories and clinical ratings by qualified professional personnel of the two institutions indicated that 80 to 95 per cent of the testees came from homes which were judged to be as or more homeless than the most homeless fourth of New York State families. The test was also given to a homey group of 78 Brooklyn testees matched in relevant characteristics with the homeless group whose families were judged by the directors of each center where the testing was conducted to be as homey as the most homey fourth of New York State families.

The resulting distribution of FAT scores showed almost no overlap. Only 16 per cent of the homeless group made scores low enough to fall within the distribution of the homey group, and only 17 per cent of the homey group received scores high enough to fall within the distribution of the homeless group scores. Homey group scores ranged from 133 to 289 and homeless group scores from 254 to 437. The mean homey group score was 209 and the mean homeless group score was 322, a difference significant at beyond the .01 level.

Subsequent studies of the effects of various variables upon homeyness-homelessness have further confirmed the validity of the test. Variables known to reflect differences in family warmth have been found to be related to FAT scores, while those unrelated to family warmth have been found to have no significant relationship to FAT scores (Elias, Manual).

The FAT yields a total score defined as an index of homeyness or homelessness, and separate scores for ten individual subtests regarding specific areas of family interaction. Instructions on the test direct the subjects to respond to the 114 statements on the basis of their opinion about general family life, and not necessarily with reference to their own family. The underlying assumption of the test is that the responses are an expression of feelings directly related to the current adjustment of the subject and his family.

Elias (Manual) has found that homelessness scores are related to age, increasing from ages 10 to 19, then leveling off; to sex, with male scores being higher than female scores at all ages; and to extreme poverty. When the effects of age, sex, and extreme poverty (under $3,000) were eliminated statistically, no significant differences were found among racial groups; religious groups, or residents of New York City and towns, cities, and farms of Arkansas. Homeyness-homelessness was not found to be related to size of family, birth order, mother's occupation, regularity of testee's church attendance, subject's birthplace, or that of his parents, or his nationality descent.

Leadership and Activity Inventory

The Leadership and Activity Inventory was designed by the project directors to include information on extra-curricular activities, friendship patterns, and exposure to experiences outside the home environment.

The Family Problems Checklist

The Family Problems Checklist was developed by a committee of the Southeastern Council on Family Relations, and later it was modified by a panel of specialists from Florida State University, the University of Georgia, and the University of North Carolina. The checklist was revised in order that it might apply to adolescents, and the number of items was reduced so that it would not be too long. to administer to adolescents (Clarson, 1965; Hanley, 1965). The modified instrument was pretested and a measure of reliability of .89 was obtained by utilizing a split-half technique (Hanley, 1965).

Two forms of the Family Problems Checklist were used in the larger research project. The form used by Clarson and Hanley was administered first. The subjects seemed to check the items too repetitiously due to the structure and wording. Therefore, the instrument was further modified and administered again. The data presented in this study are those which were gathered the second time the Family Problems Checklist was administered.

The checklist consists of 75 items pertaining to areas which may possibly be perceived as family problems. The subject is asked to respond to each item by checking "yes," "sometimes," or "no." In previous studies in which the Family Problems Checklist was employed, the items were examined individually and no family problem score was obtained. However, in the present study it was assumed that by assigning weights to the individual items an estimate of the number and intensity of "family problems" could be obtained which would be useful in comparing with selected personal, familial, and homeyness variables. The danger inherent in such a procedure is obvious: the lack of evidence concerning the validity of the Family

Problems Checklist should be considered in the evaluation of the data. Yet, in view of the lack of a better instrument for assessing the problems of low socio-economic status families, and in view of the face validity of the items, such an approach would seem to have merit.

A total family problems' score was obtained by weighting the responses to each item and totaling the points. One point was assigned to each response which indicated a problem, two points to those which indicated that something was a problem at times, and three points for a response which indicated no problem. The "yes" answer indicated the existence of a problem on all items except the following 25 items, and for these the weighting was reversed: Nos. 1, 3, 5, 7, 9, 10, 13, 16, 20-23, 30, 32, 35, 47, 48, 50, 55, 57, 59, 69, 72, and 75. There were 75 items included in scoring the instruments, so the scores had a possible range of 75 to 225. If a student did not respond to a number of items, a total score was not obtained for him; but in instances where he responded to all the items except for three or fewer an average score was given to him on the items not answered. The higher the scores the fewer problems that were perceived.

Many of the 75 items on the Family Problems Checklist concern family problems which are similar. For this reason, 19 items were chosen which seemed best to represent the various problems mentioned in the checklist without overlapping. These items were selected on the basis of several factors. An effort was made to select items which dealt with specific problems rather than items regarding broad problems, in order to avoid overlapping items. Items which the review of literature indicated to be important in intrafamilial relationships and adjustment and items about which additional knowledge would appear to be most useful were selected. The frequency distribution of the Family Problems Checklist (Table 6 in the Appendix) was examined in order to select items which were discriminating, i.e., items which had not evoked identical responses from nearly all the subjects (Riley, et al, 1954).

Teacher Rating Scale

The instrument used to measure teachers' perceptions of the subjects' behavioral characteristics was a revision of the Borgatta and Fanshel Teacher Rating Scale (1963). The original scale was derived from an analysis of the ratings made by social workers, psychologists, psychiatrists, teachers, and nonprofessional child-care workers on 316 children. Fanshel, Hylton, and Borgatta (1963) report that behavioral areas were found with some degree of independence. These areas were: (a) Physical Aggression, (b) Sexual Activity, (c) Intellectual, (d) Compulsive Cleanliness, (e) Lethargy (unmotivated), (f) Self-destructiveness, (g) Unsociability, (h) Self-recklessness (or indifference to personal consequences), (i) Stealing and Lying, and (j) Anxiety. Reliability among raters was established by Borgatta and Fanshel (1965) yielding correlation coefficients of .75, .72, .77, and .60 on four subsample scores.

With permission of the authors, the 114 items on the original instrument were analyzed by the research staff and 84 were selected to make up the instrument for the present study. These items were selected primarily because they were considered to be more applicable to the school situation and the age group under investigation.

California Test of Mental Maturity--Short Form

The 1963 revision, Level four of this test was used to measure the subjects' IQ in the present study (Clark and Tiegs, 1963). Because of its emphasis on non-verbal material, it is considered to be applicable with subjects from low socio-economic status (Kennedy, Van de Riet, and White, 1963).

BACKGROUND INFORMATION SHEET

Section 1

Name______________________________________ School______________
Last,   First,   Middle Initial

Please answer the following questions by placing the letter of the correct statement in the blank space which is found on the right hand margin opposite each question. If no letters are given for the question, you may answer it with the number it asks for.

1. My age is (give age of nearest birthday) ____

2. My grade in school is: (8th, 9th, 10th) ____

3. My race is: a) Negro   b) White   c) Other ____

4. How many living brothers and sisters (including step brothers and step sisters) do you have? ____

5. If you have a twin brother or sister do not count this person as either younger or older than you in answering the following question.--Of my brothers and sisters (including step brothers and step sisters) who are living, there are:
   a) one or more younger and none older than myself
   b) one or more older and none younger than myself
   c) both older and younger than myself
   d) no older and no younder than myself ____

6. My parents are:
   a) living together   d) both not living
   b) separated   e) mother not living
   c) divorced   f) father not living ____

7. Who are the members of your family you live with? List them:

   ____

   ____

   ______________________________ ____

Use the following information to indicate how far your parents went in school (questions 8 and 9).

a) none
b) 1st through 4th grade
c) 5th through 7th grade
d) finished 8th grade
e) finished 9th grade
f) finished 10th grade
g) finished 11th grade
h) graduate from high school
i) 1 to 3 years of college
j) college graduate
k) graduate school after college
l) don't know

8. Father (give letter which applies from above list) ____

9. Mother (give letter which applies from above list) ____

10. The main source of family income is:

a) wages; hourly wages, piece work, (weekly pay check)
b) profits and fees from a business or profession
c) salary paid on a morthly basis
d) social security or unemployment ____

11. My family lives:
a) on a farm
b) in a town of less than 2500 people
c) in a town of more than 2500 people ____

12. My mother works outside the home:
a) not at all
b) less than 40 hours a week
c) 40 hours a week
d) more than 40 hours a week ____

13. My father's work is: (Explain what work your father does)

____

____

14. If your mother works for pay outside your home, explain what kind of work she does:________________________

____

15. If you live on a farm, rate your father's occupation:
a) sharecropper or farm laborer who doesn't own his own land
b) manager or foreman who is hired to oversee on a farm
c) owns his own farm on a small piece of land
d) owns his own farm and also hires others to help, due to large size of the farm
e) migrant worker who hires out for seasonal work ____

16. How much education does your family want you to have?
Explain____

____

17. Do you have a special time to study after school? If so, when is it?____

18. If you have a special place to study, where is this located?

____

②

INDEX OF ADJUSTMENT AND VALUES (SELF CONCEPT)

Directions:

Do not put your name on your paper.

There is need for each of us to know maore about ourselves, but seldom do we have an opportunity to look at ourselves as we are or as we would like to be.

On the next pages place a check mark as it applies to yourself in each column. For example: You might check yourself like this.

	Column I			Column II			Column III		
	I AM LIKE THIS			THE WAY I FEEL ABOUT BEING AS I AM			I WISH I WERE		
	MOST OF THE TIME	ABOUT 1/2 OF THE TIME	HARDLY EVER	I LIKE IT	I NEITHER LIKE NOR DISLIKE IT	I DISLIKE IT	MOST OF THE TIME	ABOUT 1/2 OF THE TIME	HARDLY EVER
1. Neat			X	X			X		

Be sure to fill in a check in all three columns before going on to the next word.

Now turn the page and begin checking.

	Column I			Column II			Column III		
	I AM LIKE THIS			THE WAY I FEEL ABOUT BEING AS I AM			I WISH I WERE		
	MOST OF THE TIME	ABOUT 1/2 OF THE TIME	HARDLY EVER	I LIKE IT	I NEITHER LIKE NOR DISLIKE IT	I DISLIKE IT	MOST OF THE TIME	ABOUT 1/2 OF THE TIME	HARDLY EVER
1. agreeable									
2. alert.									
3. brave.									
4. busy									
5. careful.									
6. cheerful									
7. considerate. . . .									
8. cooperative. . . .									
9. dependable									
10. fair									
11. friendly									
12. generous									
13. good									
14. good sport									
15. happy.									
16. helpful.									
17. honest									
18. kind									
19. loyal.									
20. likable.									
21. obedient									
22. patient.									
23. polite									
24. popular.									
25. quiet.									

	Column I			Column II			Column III		
	I AM LIKE THIS			THE WAY I FEEL ABOUT BEING AS I AM			I WISH I WERE		
	MOST OF THE TIME	ABOUT 1/2 OF THE TIME	HARDLY EVER	I LIKE IT	I NEITHER LIKE NOR DISLIKE IT	I DISLIKE IT	MOST OF THE TIME	ABOUT 1/2 OF THE TIME	HARDLY EVER
26. reliable									
27. sincere									
28. smart									
29. studious									
30. successful									
31. thoughtful									
32. trustworthy									
33. understanding									
34. unselfish									
35. useful									

MANIFEST ANXIETY SCALE

Do not put your name on your paper.

The statements in this section represent experiences, ways of doing things, or beliefs, or preferences that are true of some people but not true of others. Read each statement and decide whether or not it is true with respect to yourself. If it is true or mostly true of you put an X in the column "Yes, This is True." If the statement is not true of you or mostly false of you, put an X in the column "NO, This is False." Answer the statements as carefully and honestly as you can. There are no correct answers or wrong answers. Here is an example:

	YES This is True	NO This is False
I would rather win than lose.	X	

The person who thought this was true for him has put an X under "Yes, this is true." If you do not understand any sentence, raise your hand and the person in charge of this study will try to help you.

	YES This is True	NO This is False
1. My table manners are not quite as good at home as when I am out in company		
2. I put off until tomorrow what I ought to do today.		
3. I like to know important people because it makes me feel important.		
4. I am often sick to my stomach.		
5. I do not tire quickly.		
6. I am about as nervous as other people.		
7. I worry over money and business.		
8. I think nearly everyone would tell a lie to keep out of trouble.		
9. I have very few headaches.		
10. I work under a great deal of strain.		
11. I cannot keep my mind on one thing.		
12. My feelings are hurt more easily than most peoples.		
13. I find it hard to make talk when I meet new people.		
14. I frequently notice that my hand shakes when I try to do something.		
15. I blush as often as others.		
16. I have nightmares every few nights.		

		YES This is True	NO This is False
17.	I worry quite a bit over possible troubles.	________	________
18.	I am often afraid that I am going to blush.	________	________
19.	My hands and feet are usually warm enough.	________	________
20.	I often find myself worrying about something.	________	________
21.	I sweat very easily even on cool days.	________	________
22.	I find it hard to set aside a task that I have started even for a short time.	________	________
23.	I do not often notice my heart pounding and am seldome short of breath.	________	________
24.	I feel hungry almost all of the time.	________	________
25.	At times I think I am no good at all.	________	________
26.	Often my bowels don't move for several days at a time.	________	________
27.	At times I feel like swearing.	________	________
28.	I have a great deal of stomach trouble.	________	________
29.	At times I lose sleep over worry.	________	________
30.	I often dream about things I don't like to tell other people.	________	________
31.	When embarrassed I often break out in a sweat which is very annoying.	________	________
32.	I have often felt that I faced so many difficulties that I could not overcome them.	________	________
33.	I have diarrhea ("the runs") once a month or more.	________	________
34.	I wish I could be as happy as others.	________	________
35.	I am usually calm and not easily upset.	________	________
36.	I am not at all confidant of myself.	________	________
37.	I cry easily.	________	________
38.	I feel anxious about something or someone almost all of the time.	________	________
39.	I am happy most of the time.	________	________
40.	It makes me nervous to have to wait.	________	________

		YES This is True	NO This is False
41.	At times I am so restless that I cannot sit in a chair for very long.	______	______
42.	I certainly feel useless at times.	______	______
43.	Sometimes I find it so hard to sleep because I am excited.	______	______
44.	I do not have as many fears as my friends.	______	______
45.	I get angry sometimes.	______	______
46.	At times I have been worried beyond reason about something that really did not matter.	______	______
47.	I have been afraid of things or people that I knew could not hurt me.	______	______
48.	I find it hard to keep my mind on a task or job.	______	______
49.	I am more self-conscious than most people.	______	______
50.	I have periods in which I feel unusually cheerful without any special reason.	______	______
51.	I am a very nervous person.	______	______
52.	I am the kind of person who takes things hard.	______	______
53.	Life is often a strain to me.	______	______
54.	I get mad easily and get over it soon.	______	______
55.	At times I feel that I am going to crack up.	______	______
56.	I don't like to face a difficulty or make an important decision.	______	______
57.	I am very confident of myself.	______	______
58.	I practically never blush.	______	______
59.	I gossip a little at times.	______	______
60.	My sleep is restless and disturbed.	______	______

FAMILY ADJUSTMENT TEST

Do not put your name on your paper.

We would like to know what people think about families in general. Please give your opinion about the general family life that exists in your neighborhood or area as you have been growing up.

You don't have to base your answers on your family alone. Base your answers on families in general.

Work quickly and try to give the first answer that comes to your mind as there are no right or wrong answers. It is necessary that you finish this entire questionnaire quickly. To do so, you cannot spend much time on any one question.

Check your answers to one of these:	YES Agree	NO Disagree	Uncertain?
If you think families you know in general are like this, put an X under Yes agree.			
1. Parents are happy when they are together.	___	___	___
2. Children have to make excuses for their parents.	___	___	___
3. Children wish their mothers would act differently.	___	___	___
4. Fathers show dissatisfaction with their families.	___	___	___
5. Fathers are hard to get along with.	___	___	___
6. Mothers are close friends with their children.	___	___	___
7. Father is jealous of the love his children have for their mother.	___	___	___
8. Children fight with one or both of their parents.	___	___	___
9. Mothers love their children equally.	___	___	___
10. Parents handle their kids well.	___	___	___
11. Children have trouble with their families.	___	___	___
12. Mothers keep their promises with children.	___	___	___
13. Children do things to spite their parents.	___	___	___
14. Children think their fathers are sorry they had them.	___	___	___
15. Fathers are mean.	___	___	___
16. Children feel that their families are disliked.	___	___	___
17. Mothers nag their children.	___	___	___

		YES Agree	NO Disagree	Uncertain?
18.	Children feel "gyped" because they do not get what they want.	____	____	____
19.	Children can reason with their mothers.	____	____	____
20.	Children are spanked unjustly.	____	____	____
21.	Mothers neglect their children.	____	____	____
22.	Mothers are ashamed of their husbands.	____	____	____
23.	One or both parents of a family become angry easily.	____	____	____
24.	When things go wrong, fathers blame it on the fact that they have children.	____	____	____
25.	Children can discuss sex matters with both of their parents.	____	____	____
26.	Children feel they bring trouble to their parents.	____	____	____
27.	One or both parents of a child stop him from having fun.	____	____	____
28.	A child thinks the parents of his friends are better than his own.	____	____	____
29.	Children are afraid to show great love for one parent in the presence of the other.	____	____	____
30.	Fathers nag their children.	____	____	____
31.	Parents show that they are disappointed in their children.	____	____	____
32.	Fathers are happiest when their wives are not around.	____	____	____
33.	Children are afraid of their mothers.	____	____	____
34.	When something goes wrong, mothers blame it on the fact that they have children.	____	____	____
35.	Children are let down by one or both of their parents.	____	____	____
36.	Mothers act moody with their families.	____	____	____
37.	Fathers are afraid of their wives.	____	____	____
38.	Mothers love their husbands.	____	____	____
39.	Matters dealing with sex cause trouble between children and their parents.	____	____	____
40.	Mothers scold their children unjustly.	____	____	____
41.	Children distrust their parents.	____	____	____
42.	Parents love their children less than they show.	____	____	____

	YES Agree	NO Disagree	Uncertain?
43. Both parents understand their children.			
44. Mothers are cruel.			
45. Mothers show dissatisfaction with their families.			
46. Children feel their parents are better to other people than to them.			
47. Mothers get in the way of their children when it is none of their business.			
48. Children are jealous because their mothers love another person very much.			
49. Children are ashamed of their fathers.			
50. Mothers are mean.			
51. Children want more love from their fathers than they get.			
52. Children are jealous of their brothers or sisters.			
53. Children believe their parents should not have married.			
54. Children like their homes as they are.			
55. Children hate their fathers.			
56. Children make fun of their mothers.			
57. Children have grudges against their mothers.			
58. Fathers are selfish.			
59. Fathers disbelieve their children.			
60. Children love one of their parents more than they do the other.			
61. Fathers do things to spite their children.			
62. Children love one parent while fearing the other.			
63. A child hears his parents say bad things behind each other's back.			
64. Parents get so mad they do not talk to each other.			
65. Fathers love their wives.			
66. Husbands are ashamed of their wives.			
67. Fathers scold their children unjustly.			
68. Children wish their fathers would act differently.			

	YES Agree	NO Disagree	Uncertain?
69. Children want to run away from home.	____	____	____
70. Children think their mothers are sorry they had them.	____	____	____
71. Parents dislike their inlaws.	____	____	____
72. Fathers wish they had never married.	____	____	____
73. Mothers disbelieve their children.	____	____	____
74. Children can rely on their fathers when help is most needed.	____	____	____
75. Children fight to become free of their parents.	____	____	____
76. Children distrust their fathers.	____	____	____
77. Fathers are moody before their familes.	____	____	____
78. Parents respect each other.	____	____	____
79. Parents disagree on religious matters.	____	____	____
80. Mothers act moody when with their families.	____	____	____
81. Children have grudges against their fathers.	____	____	____
82. Fathers try to run their children's lives.	____	____	____
83. Children are jealous of other families.	____	____	____
84. Parents disagree in ways that make children suffer.	____	____	____
85. Fathers get in the way of their children when it is none of their business.	____	____	____
86. Parents force their children to eat.	____	____	____
87. Parents blame each other when they should not.	____	____	____
88. Children are afraid of their fathers.	____	____	____
89. Children are jealous because their fathers love another person very much.	____	____	____
90. Mothers are happiest when their husbands are not around.	____	____	____
91. Fathers neglect their children.	____	____	____
92. Children hate their mothers.	____	____	____
93. Fathers are close friends with their children.	____	____	____
94. Children make fun of their fathers.	____	____	____
95. Mothers are hard to get along with.	____	____	____
96. Fathers love their children equally.	____	____	____
97. Parents nag each other.	____	____	____

		YES Agree	NO Disagree	Uncertain?
98.	Fathers are cruel.	___	___	___
99.	Children want more love from their mothers than they get.	___	___	___
100.	Mothers are selfish.	___	___	___
101.	Children dislike the size of their families.	___	___	___
102.	Parents argue with each other.	___	___	___
103.	Fathers keep their promises with their children.	___	___	___
104.	Children like to spend time with their parents.	___	___	___
105.	Mothers do things to spite their parents.	___	___	___
106.	Children can rely on their mothers when help is most needed.	___	___	___
107.	Parents force their children to do what kids do not like.	___	___	___
108.	Mothers are afraid of their husbands.	___	___	___
109.	Mothers act worried before their children.	___	___	___
110.	Children are afraid they can't come up to their parents expectations.	___	___	___
111.	Mothers wish they had never married.	___	___	___
112.	Fathers act moody with their families.	___	___	___
113.	Children are ashamed of their mothers.	___	___	___
114.	Mother is jealous of the love her children have for their father.	___	___	___

YOUR FUTURE PLANS
(EDUCATIONAL AND OCCUPATIONAL ASPIRATIONS)

Several of the questions which follow will ask you to choose one of the eight plans, so read them over carefully and see how each one differs from the others. When you understand how each is different from the others, go on to the questions. (THIS PAGE IS NOT STAPLED TO THE OTHER PAGES SO THAT YOU MAY TAKE IT OUT TO REFER TO.)

WHAT ARE YOUR PLANS FOR THE FUTURE?

Plan A - Quit high school before graduation to get a job or go into the service.

Plan B - Graduate from high school, and with no plans for further schooling, get a full-time job or go into the service.

Plan C - Graduate from high school, then get a full-time job or go into the service for a few years, and then go back to school or college.

Plan D - Graduate from high school, get a full-time job, and also go to college or school part-time.

Plan E - Graduate from high school, go to a one or two year school or college full-time, and then get a full-time job or go into the service.

Plan F - Graduate from high school, go to a one or two year school or college full-time, then transfer to a four year college full-time and then get a job or go into the service.

Plan G - Graduate from high school, go directly to a four year college and after graduation from college, get a full-time job or go into the service.

Plan H - Graduate from high school, go directly to a four year college, and after graduation from college go to a graduate school or a professional school for further study.

1. Which of the eight plans is most like that you are planning to do now? ______

- -

Most students like yourself have some idea about what other people at least a year ahead of them in school are planning to do, or perhaps have already done. Think of some of these people and pick the plan that you think are most likely to follow. The people must be at least one year ahead of you in school, and have taken the same, or about the same courses you have.

SELECT ONE OF THE EIGHT PLANS FOR:

2. those who have found their courses to be about as hard as you have. ______
3. those who have gotten about the same grades as you have. ______
4. those who have worked about as much as you have during the school year at part-time jobs to earn money. ______
5. those who have had about the same amount of money to spend on clothes, cars, records, movies, etc., as you have. ______
6. those who have been in about as many school activities and school clubs as you have. ______
7. those who have gone to about the same kind of out-of-school social events as you have. ______

- -

Now will you think about some specific person who has been interested in your future plans. If you don't know what that person would like to see you do, make the best guess you can. Don't leave any questions blank, put a letter of one of the plans in the blank after each question.

WHAT DO EACH OF THESE THINK YOU SHOULD DO?

8. your father, stepfather, or guardian. ______
9. your mother, stepmother, or guardian. ______
10. your junior or senior high school counselor. ______
11. a different junior or senior high school teacher (not your counselor) ______

12. an older brother, sister, cousin, aunt or uncle. ______

13. another adult. ______

14. a good friend your own age. ______

15. a friend who is a couple of years older than you. ______

- -

We have asked you about what plan you thought these people yould suggest for you. Some of these people's advice means more to you than does the advice of others. In the four spaces which follow we want you to rank the four people in the above list whose advice you value most. Use the number of the line above in which that person was mentioned. Example: if your father is your first choice, you would put number 8 in the first blank.

16. The person whose advice you value most about future plans. ______

17. The person whose advice you value second most about future plans. ______

18. The person whose advice you value third most about future plans. ______

19. The person whose advice you value fourth most about future plans. ______

Please check all of the blanks and see that you have selected a plan letter for each.

- -

20. Beyond this year, how many years are you planning to attend school (include college if you plan to go)? ______

21. Answer this question even if you don't plan to go to college. If you were to go to an average four-year college after high school, what kind of a problem would your family have in financing your education? ______

    a) money is such a serious problem that I will have to start earning it to help my family as soon as I get out of high school.

    b) my family (or relatives, or savings) could give me no financial help in going to college.

    c) they could give me some financial help, but less than half.

d) they could give me more than half, but not all.

e) they could give me all of my expenses.

22. If you had to choose three jobs that you would like to do in life, what would they be (be honest and serious as you EXPLAIN each carefully.)

1.____

2.____

3.____

- -

In answering the next three questions below, you will choose from one of the following answers. Please place the letter corresponding with the answer you choose in the blank following the question.

a) Graduation from 8th grade
b) Attend high school
c) Graduate from high school
d) Attend a vocational school
e) Graduate from a vocational school
f) Attend college
g) Graduate from college
h) Go beyond college

23. How much schooling do you think is necessary for the job you have listed in position number one? _____

24. How much schooling do you think is necessary for the job you have listed in position number two? _____

25. How much schooling do you think is necessary for the job you have listed in position number three? _____

- -

26. Give reasons for selecting the job you really think comes at the top of your list that you'd like to pursue for your life work.

____

____

____

____

FAMILY PROBLEMS CHECKLIST

Do Not Put Your Name On Your Paper.

Directions: We are interested in finding out certain things that occur in families today. Please read each statement carefully. Put an X in the YES column if this is true in your situation. Put an X in the SOMETIMES column if this is true some of the time. If it is not true in your family situation, put an X in the NO column.

		YES	Sometimes	NO
1.	Do your parents have enough time to spend with you?			
2.	Do work hours keep your family split up?			
3.	Is your father home enough of the time?			
4.	Do your parents have to work such long hours that no time is left for them to have fun?			
5.	Do you have enough money as a family to go places together, such as to the movies or to a ballgame?			
6.	Does your mother's working away from home create a problem?			
7.	Do your mother and father enjoy doing things the same?			
8.	Does your father have to work so far away from home that he cannot come home every night?			
9.	Does your family go to church together often?			
10.	Do the members of your family seem to feel close to one another?			
11.	Is the main person in your family who earns the money often unable to get a job?			
12.	Is the main person in your family who earns the money unable to keep a job because of too little education?			
13.	Does the main person who earns the money in your family know how to do the kind of work that would get him a steady job?			
14.	Are your parents able to find work only at certain time of the year?			
15.	Do your parents have to do work that is too hard for them?			

	YES	SOMETIMES	NO
16. Does the main one who earns the money in your family have much chance to move up in his job?	____	____	____
17. Does your family have too much work to do to make life fun?	____	____	____
18. Do you have too much work to do at home?	____	____	____
19. Are your bills far more than your family can pay?	____	____	____
20. Can you afford to buy some of the better, more expensive foods?	____	____	____
21. Can you always afford to go to the doctor or dentist when you need to?	____	____	____
22. Do your parents spend their money wisely?	____	____	____
23. Do your parents earn enough money so that you have money for the things you need?	____	____	____
24. Does your food supply sometimes get low?	____	____	____
25. Do you or some family member have to take care of your grandparents or an older relative?	____	____	____
26. Is someone in your family crippled, blind, or has some other kind of serious illness or problem?	____	____	____
27. Do your parents think that your friends are a bad influence on you?	____	____	____
28. Do your parents often disagree with their relatives?	____	____	____
29. Do your parents have too many arguments with one another?	____	____	____
30. Do your parents seem willing to listen to the children's problems?	____	____	____
31. Is someone in your family often nervous or worried?	____	____	____
32. Do the members of your family help one another and cooperate?	____	____	____
33. Do your parents think the children in the family do not behave right?	____	____	____
34. Do your mother and father have the same or similar religious beliefs?	____	____	____

	YES	SOMETIMES	NO
35. Do the children in your family have to obey the parents?	____	____	____
36. Do you have trouble getting along with your father?	____	____	____
37. Do some members of your family have bad habits?	____	____	____
38. Do you have conflicts over which television program you watch?	____	____	____
39. If your father drinks, is it a problem?	____	____	____
40. Do your father's friends sometimes cause trouble?	____	____	____
41. Is it hard for you to get along with your brothers?	____	____	____
42. Is it hard for you to get along with your sisters?	____	____	____
43. Do your mother's friends sometimes cause a problem?	____	____	____
44. If your mother drinks, is it a problem?	____	____	____
45. Is it difficult for youtto get along with your mother?	____	____	____
46. Do you live so close to other people that you have too little privacy?	____	____	____
47. Is not haveing running water in your house a problem?	____	____	____
48. Is not having a bathroom indoors a problem?	____	____	____
49. Do repairs on your house cost too much?			
50. Is not having electricity a problem for your family?	____	____	____
51. Do you have a relative or border who lives with you?	____	____	____
52. Do you have to move so often that it is a problem?	____	____	____
53. Is your family crowded in your house?	____	____	____
54. Do you need a better house?	____	____	____
55. Do the children in your family have a place to keep their things?	____	____	____
56. Do you have to live in a bad neighborhood?	____	____	____
57. If you do not have a television set, is this a problem?	____	____	____
58. If you don't have a refrigerator is this a problem?	____	____	____

	YES	SOMETIMES	NO
59. Does your family have enough good clothing for all the members of your family?	___	___	___
60. If you don't have a car, is this a problem?	___	___	___
61. If you don't have a washing machine, is this a problem?	___	___	___
62. Do you need more furniture or better furniture?	___	___	___
63. Do you need more dress clothes to wear to church or other occasion?	___	___	___
64. Is there someone in your family who needs medical care all the time?	___	___	___
65. Is your family able to get a good doctor when he is needed?	___	___	___
66. Do your parents worry about the future of the children in the family?	___	___	___
67. Do your parents worry about what they will do when they are too old to work?	___	___	___
68. If your family does not have many friends, is this a problem?	___	___	___
69. Do the children in your family have enough time for recreation?	___	___	___
70. Are the members of your family often sick?	___	___	___
71. Do some people "look down" on your family?	___	___	___
72. Does your family have a fair amount of good luck and good breaks in life?	___	___	___
73. Does school cost too much for things like school lunches and school supplies?	___	___	___
74. Are your grades in school a problem?	___	___	___
75. Do the children in your family have enough time to study?	___	___	___

LEADERSHIP AND ACTIVITY INVENTORY

DO NOT PUT YOUR NAME ON YOUR PAPER.

1. Put a check mark by the clubs or activities in which you are participating this year or in which you have participated this year. Also check any club in which you hold an office this year.

Activity	Participate			Hold Office
	Daily	Weekly	Monthly	Name Your Duty
1) Student Council				
2) Class Officer				
3) School Paper				
4) Band				
5) Choral Group				
6) Dramatics				
7) Office Assistant				
8) Library Assistant				
9) Teacher's Assistant				
10) Lunch Room Assistant				
11) Football				
12) Basketball				
13) Baseball				
14) Track				
15) Softball				
16) Water boy or time keeper				
17) Hobby Club				
18) Future Farmers				
19) Future Teachers				
20) Scouts				
21) Church Group				
22) Honor Club				
23) Other (explain)				

2. If you have some special talent that you use in performing for pay or in talent programs, explain.______________________________

3. Do you have a part-time job for which you are paid? Yes__ No__

   If so, what do you do?______________________________

   For whom do you work?______________________________

4. Do you give any of your earnings to help your family? Yes__ No__

5. If you go on to college, how would you plan to pay for your education?

   Family will help__________ Work__________
   Scholarship__________ Savings__________
   Loan__________

6. Check if you have ever attended a nursery school: Yes_____

   A kindergarten_____

   How many different elementary schools did you attend? _____

   How many different schools have you attended from the seventh grade on? _____

8. What do you do with your time after school until dark? **Check each one.**

Activity	Usually	Seldom	Never
Work at home			
Work away from home			
Loaf			
Read			
Do homework			
Watch T.V.			
Listen to radio, records			
Ride around in car			
Participate in group sport			
Fish			
Other			

   If other, explain

____

9. Right now, do you believe that you will finish high school?

Yes_______ No______

Explain____.

10. Do you ever take special care to see that your class work is neat when handed in? Yes_____ No_____

11. Do you find that as you grow older, you like most school subjects less? Yes_____ No_____

Explain____
____.

12. Do you think a boy today needs more education than your grandfather did about 50 years ago? Yes_____ No_____

13. When you get a grade with which you are not satisfied, how hard do you work to improve?

Not at all___________	A little___________
Fairly Hard___________	Very hard___________

14. Do you ever read a book just for fun? Yes_____ No _____ How often?
Once a week____ or Once a month____ Once a Year____ Never____

15. Do you think anyone can go to college if he really wants to go?
Yes_____ No_____ Explain your answer__________________________
____.

16. Check the two things which you admire most in other boys:

_____How tall they are; how they walk; their physical strength
_____Their good home and parents and their material possessions
_____Their being kind, fair, honest, dependable, brave, loyal
_____How they dress and are neat and clean and handsome
_____Good grades, eagerness, ability, confidence, ambition
_____Good sportsman
_____Friendly, well liked by others, popular, good with the girls, fun to be with
_____Has a car or motorcycle, or is good at racing and speeding
_____Is understanding, and shows an interest in you and others
_____Is talented, or has some ability other than academic or sports abilities.

17. Check the two items which best describe the kind of person you would like to be 20 years from now:

_____Good citizen, respected, well-liked, an average person
_____Make good living, have good job, to be a successful or famous person, plenty of money
_____Healthy, strong, big
_____Nice, friendly, have sense of humor, be honest and dependable
_____Handsome, neat, and well-dreseed
_____Smart, wise, well-educated
_____Settled and have a family

18. What kind of a job do you think you will be doing 20 years from now?

____
____
____
____

19. Which boy in your class or grade would you like to be the president of your class?

20. Who do you consider in your class or grade to be your best buddy?

____

21. If you had a very special secret and wanted to share it with one of your classmates, with whom would you share it?

____
____

22. Do you have a close friend or buddy in whom you can confide?

Yes_____ No_____

If so, check the two things which are most important to you about him:

_____Trustworthy, dependable, honest
_____Is outstanding in the way he looks; has a lot of things some boys don't
_____Nice, friendly, considerate, happy
_____Mature, wise, smart, intelligent, good grades
_____Understanding, sympathetic, kind
_____What others think, popular, respected, fun to be with

23. Do you have an adult in whom you can confide? Yes_____ No_____

If so, who is this person?

If so, check the two things which you like best about this person:

_____Doesn't criticize or make fun of me
_____Trustworthy, dependable, loyal
_____Kind, understanding, considerate
_____Nice, friendly, shares common interests, religious, smart
_____Interested in me, willing to listen, wants to help me

24. Have you ever been on a:

Train trip (Tell where you went)________________________________

Bus trip (Tell where you went)________________________________

Airplane (Tell where you went)________________________________

New York World's Fair (If so, check)__________________________

Another large city (Name of City)_____________________________

Long trip by car (Tell where you went)_______________________

25. Are you participating in the "Work-Study Program?" Yes___ No___

Explain the type of work____

TEACHER RATING SCALE

Code Number________ Student's Name______________________________

Name of School______________________________Grade____________

Answer each item with a check in Yes or No column. Circle the answer if you are uncertain about the rating.

	Behavior or Characteristic of the Youth	Yes	No
1.	Is physically active, vigorous		
2.	Is assertive		
3.	Is alert		
4.	Is antagonistic towards others		
5.	Is fearful, anxious		
6.	Is rational and logical		
7.	Has initiative		
8.	Is easily satisfied or pacified		
9.	Is excessively neat		
10.	Is lethargic or lazy		
11.	Is rigid in habits		
12.	Is slow in getting things done		
13.	Is smart		
14.	Avoids contact with others of his age		
15.	Requires constant reassurance		
16.	Is friendly		
17.	Speaks confidantly		
18.	Is socially withdrawn		
19.	Is interested in what goes on		
20.	Accepts responsibilities		
21.	Has a nice disposition		
22.	Is overly dependent on others		
23.	Is rough or unruly		
24.	Is likeable		
25.	Does most of the talking in a group		
26.	Shows qualities of leadership		
27.	Avoids new social experience		
28.	Has difficulty in learning things		
29.	Gets upset easily		
30.	Fusses and frets		
31.	Is reckless		
32.	Is hostile to others		
33.	Is stubborn		
34.	Avoids ordinary friendly contacts		
35.	Gets distracted easily		

		Yes	No
36.	Is cheerful		
37.	Has strong opinions		
38.	Is authoritarian		
39.	Cries easily		
40.	Is rebellious		
41.	Is interested in getting things done		
42.	Is patient		
43.	Over-reacts to minor illness, pain		
44.	Clings to adults dependently		
45.	Resists attempts of others to be friendly		
46.	Is cooperative		
47.	Does not warm up to people		
48.	Does not read well for his age		
49.	Is slow to understand people		
50.	Is conscientious		
51.	Is fidgety		
52.	Is pleasant		
53.	Is overconcerned with cleanliness		
54.	Is clearminded		
55.	Shows warmth and affection		
56.	Responds to attention quickly		
57.	Is curious about things around him		
58.	Is gloomy or sad looking		
59.	Has lots of pep and energy		
60.	Is agreeable		
61.	Is apparently unmotivated to do anything		
62.	Is overly emotional		
63.	Is prim, prissy, overly proper		
64.	Withdraws from people		
65.	Is mature for age		
66.	Is very tense		
67.	Pays attention to the task at hand		
68.	Is defiant		
69.	Does not show fear when appropriate		
70.	Is overly nervous		
71.	Smiles		
72.	Is tense		
73.	Pays attention to things going on		
74.	Appears sulky or sour		
75.	Is over-excited easily		
76.	Is irritable		
77.	Is bright		
78.	Is restless		

	Yes	No
79. Demands attention		
80. Is moody		
81. Is resistent		
82. Loses interest in things easily		
83. Is sluggish		
84. Does what people want him to		

FOLLOW-UP INTERVIEW SCHEDULE FOR SENIORS GRADUATED IN JUNE, 1968

PART I

FOR ALL RESPONDENTS

Date of Interview________________

1. Did you graduate from high school with complete standing (diploma)?

   1 Yes 2 No 3 Not sure

2. What pattern of subjects did you follow in high school?

   1 College preparatory
   2 Job preparation, vocational
   3 Not sure
   4 Other

3. During the summer just passed, what did you do?

   1 Attended summer school to complete high school requirements
   2 Began at college, university, technical or business school, etc.
   3 Began formal apprenticeship
   4 Recreational activities; did not look for a job
   6 Worked, a total of 1 to 6 weeks
   7 Worked, a total of 7 to 12 weeks
   8 Looked for a job without success
   9 Helped out at home
   0 Other____
   ____

4. What are you doing now?

   1 Completing high school requirements
   2 Attending a technical, trade or business school
   3 Attending a junior college
   4 Attending a university
   5 Working and studying part-time (evening school, correspondence course, etc.)
   6 In the service
   7 Working full-time, not studying
   8 Looking for work
   9 Helping out at home
   0 Other____
   ____

5. You have indicated earlier what your educational and vocational plans were. For one reason or another, you may have changed your mind. What is your plan now?

2 Hold a full-time job or go into the service, with no plans for further schooling
3 Hold a full-time job or go into the service for a few years, and then go back to school or college
4 Hold a full-time job and also go to college or school parttime
5 Attend a one- or two-year college full-time and then get a full-time job or go into the service
6 Attend a one- or two-year college full-time, and then transfer to a four-year college full-time, and then get a full-time job or go into the service
7 Attend a four-year college right after high school, and after graduation from college, get a full-time job or go into the service
8 Attend a four-year college, and after graduation go on to a graduate school or a professional school for further study
9 Would like to go to college, technical school, etc., but cannot see how he can do so
0 Other____
____

6. What obstacles, if any, are making it hard for you to carry out your plans?

1 Physical handicap or health problems
2 Shyness, uncertainty about how to proceed, anxiety about making the wrong decision, can't seem to get going, personality problem
3 Financial resources lacking or uncertain
4 Lack of skill or ability
5 Doesn't have the right contacts to help him
6 Some person does not want him to follow this plan
7 There are few obstacles of this kind
8 No serious obstacles are forseen
0 Other____
____

7. Who has been most helpful to you in developing and carrying out your plans?

1 Father, stepfather or grardian
2 Mother, stepmother or guardian
3 Brother, sister, aunt or uncle
4 A school counselor
5 A school teacher
6 A faculty member at college, technical or business school, etc.
7 An employer, workmate, or employment officer
8 Girl friend
9 A good friend of your own age or a few years older
0 Other____
____

8. When you were in high school, did the guidance you received include

   a. Information about college, technical school, how to apply, etc.
   b. Information about occupations, how to apply, etc.
   c. Tests of aptitudes, interests, etc., to help you know yourself better
   d. Individual counseling about your plans

   For each: 1 Yes 2 No 3 Not sure 4 some but not enough

9. All in all, was the guidance and counseling you received at school

   3 Very helpful
   2 Of some help
   1 Of little or no help
   0 None received

10. Have you any plans concerning marriage?

   4 Marriage
   3 Engaged
   2 Thinking about asking a particular girl
   1 No such plans at present
   0 Other______________________________
   ____

11. What do you like to do with your spare time?

   1 Learn something, develop a skill
   2 Make or repair something
   3 Recreation: fish, hunt, walk, sports, etc.
   2 Read, write, draw
   5 Other______________________________
   ____

12. Has your place of residence changed in the past year?

   1 Yes, moved along with parents
   2 No, still____________________________
   3 Boarding or in residence while attending college
   4 Not living with parents, self supporting
   0 Other ______________________________
   ____

13. Has your father changed jobs in the past year?

____

Has your mother changed jobs in the past year?

____

e.g. 4 to a better job
3 To another job about as good
2 To a less satisfactory job
1 Laid off or quit
0 Other____
____

14. In general, how do you feel about your plans and the way they are working out?

5 Very pleased
4 Satisfied, no complaint
3 No particilar feelings
2 Concerned, anxious about possible obstacles
1 Very dissatisfied

15. What is your main incentive? What pushes you on and makes you want to succeed?

1 Desire for a good life (house, car, income, etc.)
2 To be able to help others
3 To get a good job, education is needed
4 Personal growth, satisfaction
5 To avoid vocation of hard, physical labor
6 Expectation of others
7 To rise above parents level of living
8 Desire to succeed
9 Not sure
0 Other____
____

PART II

FOR RESPONDENTS ENROLLED IN AN EDUCATIONAL PROGRAM

1. How are you paying for your education? Number in order.

_____Financial help from family

_____Own earnings

_____Scholarship

_____Borrowing

_____Other____

5 Source of most money
4 Source of next most
3 Etc. (3, 2, 1)
0 Source of no money

2. How clear are your plans for the kind of work you will do after you finish your education?

3 Preparing for a particular occupational goal
2 Has narrowed his choice to a few alternatives related to his education
1 Is exploring various possibilities
0 Has no idea what he is going to do

3. In general, how do you feel about the educational program you are now following?

5 Very pleased; it could hardly be better
4 Satisfied; it's all right
3 No particular feelings
2 Uncertain; not sure it's the right course for him; anxious; somewhat disappointed
1 Very dissatisfied; it's not what he wants

PART III

FOR RESPONDENTS ENGAGED IN EMPLOYMENT

1. For how many months have you been working at this job?

2. How many different jobs, lasting a week or more, have you had since the end of school in June? Include different jobs for the same employer.

3. In finding employment, what methods did you use?

___a. A relative or friend told about the job or helped him to get it
___b. Followed up newspaper advertisement
___c. Went to an employment agency
___d. Telephoned employers to inquire
___e. Wrote letters of application
___f. Called on employers in person
___g. Self-employed
___h. Job was offered him without his prior application
___i. Other____

2 The main method used (one only)
1 Other methods used sometimes
0 Methods never used

4. What future do you see for yourself in your present job?

7 Definite assurance or strong expectation of advancement
6 It could definitely be a stepping stone to a better job
5 There is a possibility of advancement
4 The job is expected to continue but with no prospect of advancement; a dead-end job
3 The job is unsatisfactory; he is thinking of quitting
2 The job is temporary only (e.g. seasonal, project, or contract) layoff is expected
1 Doesn't know; has no thought about it

5. In general, how do you feel about your job?

5 Very pleased; it could hardly be better
4 Satisfied; it's all right
3 No particular feelings
2 Uncertain; not sure it's the job for him; anxious; sometimes disappointed or dissatisfied
1 Very dissatisfied; it's not the job he wants

PART IV

FOR RESPONDENTS WHO ARE UNEMPLOYED AT PRESENT

1. How long have you worked altogether since the end of school in June?

2. What do you see as the main obstacle to your getting a satisfactory job?

1 No job openings
2 Dislike of the kind of work available
3 Physical handicap, health problems
4 Shyness, lack of confidence, uncertainty about how to apply
5 Lack of necessary training (qualifications, ability, skill)
6 Not old enough
7 Prejudice on the part of employers
8 Needed at home
9 Doesn't know, can't figure it out; no opinion
0 Other____
____

3. In seeking employment, what methods have you used?

___Getting relatives and friends to ask around and speak for him
___Following up newspaper advertisements
___Going to an employment agency
___Telephoning employers to inquire or apply
___Writing letters of application
___Calling on employers in person to apply
___Self-employment
___Other____

2 The main method used (one only)
1 Other methods used sometimes
0 Method never used

4. Ingeneral, how do you feel about your present job prospects?

5 Confident; a good opportunity is in sight
4 Not worried; "something will turn up"
3 No particular feelings
2 Unhappy, frustrated, angry, worried
1 Discouraged, hopeless, reconsiled to unemployment

TABLE 32
SCHOOLS PARTICIPATING IN THE PROJECT

LOCATION	SCHOOL NAME		STUDENTS	
		Sept. 1966	Sept. 1967	Sept. 1968
Altha	Altha H.S.	30	25	24
Blountstown	Mayhaw H.S.	22	21	20
Bristol	Bethune H.S.	12	12	10
Bronson	Bronson H.S.	25	20	20
Campbelltown	St. Paul H.S.	46	34	36
Cedar Key	Cedar Key H.S.	10	9	8
Chiefland	Chiefland H.S.	30	38	40
Chiefland	Vocational H.S.	13	--	--
Chipley	Roulhac H.S.	39	29	19
Ft. White	Ft. White H.S.	10	9	7
Ft. White	Bethlehem H.S.	10	--	--
Graceville	Graceville H.S.	31	28	25
Grand Ridge	Grand Ridge H.S.	29	18	17
Greenwood	Union Grove H.S.	37	25	24
Lake Butler	Union County H.S.	21	22	16
Lake Butler	Vocational H.S.	14	7	7
Lake City	Richardson H.S.	106	97	93
Lake City	Hunior H.S.	58	--	--
Lake City	Columbia H.S.	87	134	115
Live Oak	Douglas H.S.	76	71	64
Live Oak	Suwannee Junior H.S.	30	53	--
Live Oak	Suwannee H.S.	33	--	54
Marianna	Marianna H.S.	62	48	48
Marianna	Jackson County Tr. S.	70	48	47
Quincy	Carter Parramore H.S.	172	131	122
Shadeville	Shadeville H.A.	18	13	13
Vernon	Vernon H.S.	40	34	38
Williston	Vocational H.S.	21	26	23
	TOTAL SAMPLE	1,213	952	890

TABLE 33

CHARACTERISTICS OF THE TOTAL SAMPLE

VARIABLES	BLACK YOUTH		WHITE YOUTH	
	Freq. N = 411	Per Cent %=100.0	Freq. N = 343	Per Cent %=100.0
Socio-economic Status				
Lower-lower	141	34.3	91	26.5
Upper-lower	187	45.5	243	68.2
Lower	83	20.3	18	53.0
Age				
13	5	1.2	9	2.6
14	88	21.5	76	22.2
15	136	33.1	100	29.2
16	130	31.7	118	34.4
17	46	11.2	35	10.2
18	4	.9	5	1.5
19	1	.2	---	---
Grade				
Eighth	2	.5	.5	1.5
Ninth	145	35.2	120	34.9
Tenth	147	35.8	125	34.4
Eleventh	117	28.5	93	27.1
Marital Status of Parents				
Living Together	250	60.8	266	77.5
Separated	85	20.7	8	2.3
Divorced	22	5.4	29	8.5
Both Not Living	4	.9	1	.3
Father Not Living	33	8.0	32	9.3
Mother Not Living	17	4.1	7	2.0
Ordinal Position in Family				
Oldest Child	91	22.1	84	24.5
Middle Child	241	58.7	162	47.2
Youngest Child	62	15.0	85	24.8
Only Child	12	2.9	10	2.9
Unknowns & Blanks	5	1.3	---	---

VARIABLES	BLACK YOUTH		WHITE YOUTH	
	Freq. N = 411	Per Cent %=100.0	Freq. N = 343	Per Cent %=100.0
Number of Siblings				
None	6	1.5	10	2.9
1	17	4.1	52	15.2
2	18	4.4	66	19.2
3	48	11.7	43	12.5
4	53	12.9	49	14.2
5	44	10.7	39	11.4
6	42	10.2	27	7.9
7	38	9.3	20	5.8
8	54	13.2	12	3.2
9	39	9.5	10	2.9
10	19	4.6	7	2.0
11	18	4.4	5	1.5
12	6	1.5	1	.3
13	4	.9	1	.3
14	1	.2		
15	1	.2		
16	1	.2		
17	1	.2		
18			1	.3
Unknown	1	.2		
Father's Education				
None--Seventh Grade	107	26.0	72	20.9
Eighth Grade	36	8.7	55	16.0
Ninth Grade	32	7.8	33	9.6
Tenth--Twelfth Grade	55	13.4	56	16.3
Twelfth Grade	46	11.2	58	16.9
1-3 Years College	9	2.2	11	3.3
College Graduate	7	1.7	7	2.0
Graduate School	0	0.0	0	0.0
Unknown	117	28.5	51	14.9
Blanks	2	.5		

VARIABLES	BLACK YOUTH		WHITE YOUTH	
	Freq. N = 411	Per Cent %=100.0	Freq. N = 343	Per Cent %=100.0
Mother's Education				
None-Seventh Grade	50	12.2	31	9.0
Eighth Grade	41	10.0	41	11.9
Ninth Grade	56	13.6	40	11.7
Tenth Grade--Eleventh	108	26.6	72	20.9
Twelfth Grade	76	18.5	111	32.4
1-3 Years College	11	2.7	5	1.5
College Graduate	5	1.2	9	2.6
Graduate School	1	.2	2	.6
Unknowns & Blanks	63	15.3	32	9.3
Persons Living in Family Residence				
Father				
Absent	153	37.3	57	16.6
Present	227	62.7	285	83.1
Unknown	1		1	.2
Mother				
Absent	77	18.7	25	7.3
Present	334	81.3	318	92.7
Unknown				
Brothers				
None	118	28.8	115	33.5
(1-4)	251	61.1	216	62.9
(5-13)	30	7.3	12	3.5
Unknown	12	2.8		
Sisters				
None	137	33.4	127	37.0
(1-4)	234	56.9	209	61.9
(5-13)	32	7.8	7	2.0
Unknown	8	1.9		
Relatives				
None	314	76.6	300	87.5
1	96	23.3	42	12.3
(2 or more)			1	.2
Unknown	11			
Others				
None	389	94.9	335	97.7
1	21	5.1	7	2.0
(2 or more)			1	.2
Unknown	1			

VARIABLES	BLACK YOUTH		WHITE YOUTH	
	Freq. N = 411	Per Cent %=100.0	Freq. N = 343	Per Cent %=100.0
Farm-Type Job of Father				
None	281	68.3	209	60.9
Sharecropper	20	4.9	8	2.4
Migrant Worker	7	1.8	3	.8
Manager	4	.9	3	.8
Owns small Farm	27	6.5	34	9.9
Owns Large Farm	14	3.4	11	3.3
Unknown				
Does some farming, but other work for living	58	14.1	75	21.9
Parental Aspiration for Subject's education				
Eighth Grade				
Twelfth Grade	58	14.2	67	19.5
Junior College	56	13.6	51	14.8
Four-year College	25	6.0	20	5.8
Graduate School	181	44.1	93	27.2
Much as Possible	71	17.3	105	30.6
Unknown & Blanks	20	4.8	7	2.0
Father's Occupation				
Unemployed	31	7.5	19	5.5
Unskilled	78	18.9	25	7.3
Semi-skilled	157	38.1	99	28.9
Skilled	51	12.4	78	22.7
Foreman, sm. landowner	21	5.1	64	18.7
Salesman, lg. landowner	6	1.4	11	3.2
Unknown & Blanks	64	15.5	36	10.4
Retired	3	.7	8	2.4
Judges, etc.			1	.3
Teachers			2	.6
Mother's Occupation				
Unemployed	147	35.8	181	52.8
Unskilled	148	35.8	24	6.9
Semi-skilled	70	17.1	57	16.9
Skilled	13	3.2	29	8.4
Store Clerk, etc.	3	.8	28	8.1
Nurse, Teacher, etc.	0	0.0	6	1.7
Unknown & Blanks	30	7.3	18	5.2
Retired	0	0.0	0	0.0

VARIABLES	BLACK YOUTH		WHITE YOUTH	
	Freq. N = 411	Per Cent %=100.0	Freq. N = 343	Per Cent %=100.0
Number of Hours Mother Employed				
Not At All	151	36.7	185	53.9
Less Than 40 Hours	128	31.1	52	15.2
40 Hours Weekly	58	14.2	72	20.9
More Than 40 hours	58	14.2	29	8.5
Unknown	16	3.8	5	1.4
Main Source of Family Income				
Profits and Fees	27	6.5	35	10.2
Monthly Salary	62	15.1	65	18.9
Wages	258	62.9	184	53.6
Social Security, Unemployment	49	11.9	41	11.9
Unknown & Blanks	3	.7		
Others	12	2.9	18	5.2
Location of Family Residence				
On A Farm	105	25.6	166	29.2
Town, Less Than 2,500	104	25.3	77	22.5
Town, More Than 2,500	98	48.2	100	48.4
Unknown & Blanks	4	.9	0	0.0
Subject's Special Study Time				
After School	80	19.5	51	14.9
After Dinner	187	45.4	126	36.7
Other	34	8.3	20	5.8
None	103	25.0	143	41.7
Unknown	7	1.8	3	.9
Subject's Special Study Place				
Own Room	186	45.3	141	41.1
Another Room in House	86	21.0	62	18.1
At School	13	3.1	6	1.7
None	98	23.9	116	33.8
Unknown	11	2.6	5	1.5
Other	17	4.1	13	3.8

CRITERIA FOR DETERMINING CHANGES FROM YEAR 1--YEAR 3 FOR INSTRUMENTS

1. Taylor's Anxiety

Mean change was 8.1, S.D. was 4.4
Stable = ± 4 points
Increased = +5 and above
Decreased = -5 and below

2. Bills' Self Concept

Mean change was 7.2 points, S.D. was 5.0
Stable = ±5 points
Increased = +6 and above
Decreased = -6 and below

3. Elias' Family Adjustment

Mean change was 219 points, S.D. was 75 points, took half of S.D. ± 219 to determine stability, thus:
Stable = 182-256
Increased = 256 and above "HOMEY"
Decreased = 181 and below "HOMELESS"

4. Educational and Occupational Aspirations

Stable = No change from Year 1-3
Increased = Any degree of increase from Year 1-3
Decreased = Any degree of decrease from Year 1-3

This criteria was used in Tables 9 through 20.

SUMMARY AND IMPLICATIONS FROM DISSERTATIONS

Eight dissertations are summarized in detail in the Appendix. Five of these used data from the first year when the boys were in the 8th, 9th, 10th grades. Mr. Bienvenu's study used data from the second year as well, and Mrs. Lopez's dissertation used data from all three years. Each of these studies has implications for various government programs as well as for professional groups concerned with directing the disadvantaged toward more fruitful goals in their educational and vocational aspirations for adult life.

Maxwell's (1967) results indicated that subjects who were overtly "homeless" tended to exaggerate their ratings of self-concept, and that a greater degree of "homelessness" tends to rise as the parents' occupational status declines. Thus, it appears that within the family unit there is provided a means for the individual youth to compare his goals, aspirations, with the reality which is perceived by him. The author felt that these adolescents tend to overcompensate by exaggerating their rating of self-concept. Be recognizing that these adolescents who do have feelings of "homelessness" and who concomitantly tend to overrate themselves, provides a means for helping them identify with the aspirations for vocational and educational goals higher than that of their parents.

The results of Hewitt's (1967) study appear to support the above findings. Hewitt found a relationship between disadvantaged adolescent males' feelings of "homeyness" and their perception of family problems, i.e. the subjects who perceived fewer family problems experienced more "homey" feelings than those who perceived more family problems. This study has more implications for those who work directly with family life education since it deals directly with adolescents' perceptions of the number and type of problems of the family.

Schmalzreid's (1967) study was focused directly with the effects of anxiety on the educational and vocational aspirations of lower-class adolescent males. Her results indicated that: (1) there is a low but significant relationship between anxiety and educational plans of white youth; (2) there is a low but significant relationship between anxiety and number of years of schooling planned by black youth; (3) for both black and white subsamples a low negative, but significant relationship existed between level of anxiety and number of years perceived as necessary for first occupational choice; (4) for the white youth, anxiety was positively related to McGuire-White rank of first occupational choice. The factors which appear to influence the educational and vocational plans of these individuals to a greater extent than level of anxiety included: (a) mother's occupation and educational attainment; (b) father's occupation and educational attainment; (c) age; (d) birth order; and (e) number of siblings. Thus, the study points to the familial influences which appear to have relevance to the development of either high or low aspirations in these areas.

Bienvenu (1968) presented results of the effects of school integration on the self-concept and anxiety of lower-class black males. Results indicated that these adolescents exhibited a lower self-concept score after one year of attendance in an integrated school, whereas self-concept scores of black youth who remained in the segregated schools showed no significant changes. Concomitant with a lower self-concept among males in the integrated situation was an increased level of anxiety from the previous year. The study presents evidence for school personnel (guidance counselors) which showed that they should be prepared to aid their students in being better prepared for integration by helping them realize some of the implications such a move would have.

Covington (1968) dealt with the relationship between creativity, intelligence, self-concept, family adjustment, and anxiety as personality variables. Results appear to support current research on the relation between creativity and intelligence in that no significant relationship was found between these two variables. Furthermore, no significant relationships were found to exist between creativity, self-concept, anxiety, or family adjustment. Perhaps the most relevant finding of the study concerns the relation between creativity and educational aspiration. A significant relation between these two variables was found for the white youth but not for the black youth. For the white students, those aspiring to graduate from college were the more creative, while almost all black students regardless of their creativity rating aspired to obtain a college education. This study has several implications for an increased understanding on the part of professional groups and programs in that boys who demonstrate creative ability apparently aspire to high educational goals. The disadvantaged state does not appear to overshadow the development of varied degrees of creativity, and creativity tests appear to have the potential of being diagnostic tools for determining job placement, training, and guidance counseling.

King (1967) studied the effects of the teachers' perceptions of lower-class students in determining the degree and quality of interaction with the student. The results generally indicated that there is a low, but significant relation between the teachers' perceptions and the students' scores on anxiety and self-concept ratings. Students who had adequate, good self-concepts obtained more favorable teacher ratings as well as lower anxiety scores. As students' IQ's decreased, the teachers' perceptions of their behavior decreased concomitantly and they received less favorable ratings. An increased understanding of the personal, familial, and sociocultural factors of disadvantaged youth on the part of educators and other influential groups would be most beneficial in aiding these individuals not only in the educational process but helping them overcome many of the obstacles facing them in life.

Lopez (1969) studied developmental changes over the three years to the extent of the youths' participation in educational and recreational activities, and related these changes to their occupational aspirations. She found that these adolescents had a low level of participation and there was some fluctuation from year to year. Unrealistic aspirations changed to more realistic ones as the youth grew older. With each succeeding year, the number of students with very high aspirations diminished. She felt this could be that the marked frequency of change was the result of growing self-understanding.

THE RELATIONSHIPS OF FAMILY ADJUSTMENT TO THE SELF CONCEPT OF LOWER-CLASS ADOLESCENT MALES

Joseph W. Maxwell,* Ruth J. Dales, and James Walters

Self-structure is an assimilation of particular attitudes of other individuals towards oneself, and an organization of the social attitudes of the social group to which one belongs. The self develops in the process of social experience and activity as a result of the individual's relations to that process and to other individuals within it (Mead, 1934, p. 135).

Cooley (1956, p. 23) contended that primary group members are fundamental in the formation of the individual's self. The significance of the parent's role in the development of the child's self concept is obvious in the fact that the parents are the persons who are present earliest and most consistently in the life of the child, and by whom the child first establishes his own identity (Sullivan, 1947).

Growing evidence from research suggests that a child's opinions of himself and acceptance of himself are positively related to the opinion and acceptance his parents have of him. For example, Jourard and Remy (1955) demonstrated that high self-regard and adjustment of a child are associated with his feelings that his parents regard him highly. A study by Brodbeck and Perlmetter (1954) indicated that self-dislike in children was a result of conflictual parent-child relationships. Lefeber (1965) found that boys who suffer from self-devaluation uniformly have a lower sense of worth as a person and as a family member.

In a similar study, Manis (1958) investigated extreme "adjusted" and "maladjusted" groups of college students on the basis of certain MMPI scores. The findings supported the assumption that adjusted subjects felt themselves to be more highly regarded by their parents than did the maladjusted subjects. Silver (1958) in a study of rural male adolescents, found a significant relationship between level and stability of self concept and parental acceptance.

As Wylie (1961) has indicated, the parent can influence the development of various aspects of the self concept, including:

1. the generalized level of self regard
2. the subjective standards of conduct associated with role and individual status

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3. the realism with which one views his abilities and limitations and his capacity for accepting them

4. the degree of acceptance of inevitable characteristics such as hostility, jealousy, and sex as components of the self concept

5. the adequacy of one's means of correctly evaluating his effect on others

While the role of parents in self concept formation is well established theoretically, it has not been sufficiently validated by empirical research. Although the family has been recognized as the basic reference group for the individual and has been treated widely in social-psychological research, it has usually been considered as a dependent variable (Nye and Berardo, 1966).

The purpose of this research was threefold: (1) Most of the studies in this area have employed a response-response correlational approach, with two reports being made by the child, one concerning his views of his parents' attitudes toward him. In some cases, a self-concept report made by the child has been correlated with a report made by his parent concerning his views of the child, or his views of the child's self-concept. In either case, the independent variable was restricted to the parents' attitude toward the child, as perceived by the parent himself or by the child.

This study sought to deal with a more comprehensive independent variable, family adjustment. While this concept included the perceived attitude of the parent, it also recognized the attitude of the child toward his parents and his family life in general. The use of a measure of family adjustment permitted the determination whether a child whose overall family interaction had been primarily warm, loving, and harmonious would tend to view himself in positive terms, and whether a child whose family interaction had been characterized predominantly by hostility, disapproval, and rejection would tend to view himself in a negative way.

(2) Most of these studies have been concerned with the simple relationship of a single variable to another. Although many sociological inquiries are directed at understanding the relationship between just two variables--supposedly a cause and its effect--few two-variable relationships are unaffected by other factors. The classical approach to this problem has been the introduction of experimental controls. As in most surveys, the possible confounding influences of extraneous variables could not be removed experimentally from this study. This was done, therefore, through the process of cross-tabulation, wherein the relationship between the two variables of primary interest was examined within separate categories of additional variables.

(3) Previous studies have dealt with comparisons of self-concept formation among social classes. This study attempted an intensive examination of factors affecting self concept development within the lower class. Research has suggested the presence of unique obstacles in the personality development of boys from low-income families (Spicolo, 1960; Harris, 1961) resulting in lower self-esteem.

If an individual's concept of himself is demeaning, then his feelings of insecurity and unworthiness will reveal themselves in his unacceptable social compensation or his withdrawal from socially threatening situations. His fear of failure, his unrealistic perception of situations, and his poor motivation may cause him to set his level of aspiration rather low (Lewin, 1944). This research, therefore, endeavored to obtain relevant information about the factors deleterious to self esteem among lower-class boys.

The major hypotheses of the study were that family adjustment and self concept of lower-class adolescent males were not significantly related, and that the relationship between family adjustment and self concept were not significantly affected by: (a) race, (b) age, (c) size of family, (d) order of birth, (e) marital status of parents, (f) father's education, (g) mother's education, (h) father's occupational status, and (i) mother's employment status. It was further hypothesized that self concept was not significantly related to attitudes toward father, attitudes toward mother, or father-mother attitude quotient (preference for one parent over another).

Method

Subjects. The 732 subjects in this investigation included 427 Negroes and 305 Caucasions. Ages ranged from 13 to 17 with the mean age being 14.7 years. Thirty-seven per cent of the subjects were in the eighth grade; 32 per cent in the ninth; and 31 per cent in the tenth.

Sixty-four per cent of the parents were living together; 16 per cent were separated; 8 per cent were divorced; and the remaining 12 per cent were widowed or deceased.

The number of children in the family ranged from 1 to 22. Three per cent of the subjects were an only child, 53 per cent had from 1 to 5 siblings, and 44 per cent had 6 or more siblings.

The education of the subjects' fathers was unknown in 26 per cent of the cases. Of those whose education was known, 82 per cent had less than a twelfth-grade education, 12 per cent had completed high school, and the remaining 6 per cent had some college experience.

basis of the records of the individual school guidance counselors as well as on the basis of their social class score on the McGuire-White Index of Social Status (McGuire-White, 1955). Data collection for the larger project began during the 1965-66 academic year and was completed by the end of the academic year, June 1968.

The participating students met the following criteria:

a. enrolled in one of 29 schools located in culturally deprived areas of North Florida

b. Negro or white

c. enrolled in eighth, ninth, or tenth grade in the fall of 1965

d. between the ages of 13 and 17 during the fall of 1965

e. from a lower social class family as measured by the McGuire-White Index of Social Status (McGuire-White, 1955)

f. Scoring, originally, 70 or above if Negro, on a standardized intelligence test, and 85 or above if white. Criteria for determining the IQ differential was based on the findings of Kennedy (1963).

During the 1966-67 school year one of the research assistants on the larger project administered the California Test of Mental Maturity, Short Form, to the entire sample. Generally, students were retained in the study who had IQ's of 70 or above if they were Negro and 80 or above if they were white. In selected instances youth were included in the study whose IQ's were below 70 when school records and other evidence from the schools suggested that the students were functioning at a satisfactory level intellectually.

On the basis of the developmental orientation of the present investigation it was decided that, besides satisfying the above requirements, the participants in this study had to meet the following additional criteria:

a. to have been enrolled in the eighth or tenth grade the first year of the study and to have participated in it regularly for three consecutive years

b. to have completed each of the three instruments utilized in this study during the three consecutive years (see Appendix)

Upon investigation of the records of the larger study, it was found that 302 participants satisfied these requirements. They constituted the sample of this study.

Subjects possessed more information about mothers than about fathers. The education of 18 per cent of the mothers was unknown. In cases where this information was provided, 75 per cent completed the eleventh grade or less, 18 per cent completed high school, and 7 per cent completed one or more years of college.

The occupation of the fathers was unknown by 18 per cent of the subjects. Of those that were known, 6 per cent were classified as unemployed, 13 per cent as unskilled, 41 per cent as semi-skilled, 26 per cent as skilled, 13 per cent as foremen or small land-owners and 1 per cent miscellaneous others.

Mothers of the subjects were not employed in 45 per cent of the cases; 23 per cent were employed less than 40 hours weekly, and 32 per cent were employed 40 or more hours a week. The mother's occupation of only 3 per cent of the total sample was unknown.

Subjects were relatively evenly distributed with regard to residential background, with 32 per cent living on a farm, 37 per cent living in a town of less than 2,500 population, and 31 per cent in a town of more than 2,500 population.

Procedure. Self concept was measured by the Junior High s School Form of the Index of Adjustment and Values, developed by Bills (1951). On the "Self" form the subjects were asked to respond to each of 35 trait words that they were like that "most of the time," "about one-half of the time," or "hardly ever." They were then asked to indicate how they felt about being that was as "I like it," or "I neither like nor dislike it," or "I dislike being this way." They also checked how they would like to be inrespect to each of the traits using ratings of "most of the time," "about one-half of the time," or "hardly ever." Instructions were given to complete the three ratings for each trait word before proceeding to the next word.

The self concept score was obtained from the three sub-columns under the heading "the way I feel about being as I am." Ratings were on a three-part scale, "I like it," "I neither like nor dislike it," and "I dislike it." The total of the three sub-columns provided the individual score, which ranged from a possible low of 35 to a possible high of 105.

The Elias Family Opinion Survey (Elias, 1952) called also the Family Adjustment Test, was employed as a measure of family adjustment. It was designed to measure the presence of "homey" or "homeless" feelings among individuals. An individual's feelings toward his intra-family relations are "homey" when (1) he feels himself positively drawn toward his family group and its members and (2) feels that they desire to move positively toward him. Homelessness is indicated when the opposite of either of the above conditions exist, i.e., when intra-family relations are negative and divisive, characterised more by hostility than harmony. The Family Adjustment Test consists of 114 statements reflecting attitudes toward family life in general, with which a subject could agree, disagree, or be uncertain. The underlying assumption of the test is that the responses are an expression of projected feelings related directly to the current adjustment of the subject and his family. The total score was accepted as an index of family adjustment, and separate scores were obtained for ten individual sub-tests, including attitude toward mother, attitude toward father, and father-mother attitude quotient.

Analysis. Thirteen separate hypotheses were tested in this study. The first hypothesis may be considered the primary one, or the central focus of the investigation. A simple bivariate analysis was made of this relationship by the use of the Pearson r.

The next nine hypotheses dealt with the effect of nine individual variables upon the relationships tested in hypothesis one, and required a multivariate analysis. The method of achieving a multivariate analysis was that of introducing a third variable to elaborate a proposed causal relationship between two other variables. This method has been discussed fully by Herriott (forthcoming).

In testing each of the hypotheses relating to the introduction of third variables, a specific procedure involving four steps was followed:

1. By means of chi square analysis, the significance of the relationship between the third variable and the independent variable (family adjustment) was tested.

2. The significance of the relationship between the third variable and the dependent variable (self concept) was tested, also by means of chi square.

3. The data were subdivided into categories of the third variable, and within each group the Pearson r was employed to test for the significance of the relationships between family adjustment and self concept.

4. The measures of correlation obtained in step three were converted to Z scores, and these scores were tested to determine whether they were significantly different from each other, or from zero.

The last three hypotheses in this study involved three new independent variables, and a bivariate analysis was performed for each by use of the Pearson r.

Although the possible combinations of relationships in a three-variable model are numerous, only three are actually observed in this study and are presented for clarification:

(1) If a positive relationship exists between X (independent variable) and Y (dependent variable), X and Z (third variable), and Z and Y, the investigator may believe that the third variable, being antecedent to the independent variable, is a potentially invalidating one. The relationship between X and Y could possibly be the result of the relationship between each and the third variable. If, when divided into categories of the third variable, the primary relationship does not disappear, it may be concluded that the third variable is not an invalidating one.

(2) The observation of a positive relationship between X and Y and between X and Z, and no relationship between Z and Y, may create the expectation that the primary relationship is different in the separate states of the third variable.

(3) The third variable may be unrelated to either X or Y, while a positive relationship is found between X and Y. Under these conditions, the investigator would expect the positive XY relationship to be reproduced within each state of the third variable. The assumption would be that the XY relationship would be not significantly different from one state of Z to the other.

Results

A significant relationship was found to exist between the family adjustment and self concept of lower-class adolescent males ($r=.16$, $p=.001$). Good family adjustment, including acceptance, emotional warmth, and other attitudes generally conveyed by the word "love" was positively associated with the degree of self-esteem experienced by the lower-class boys. Where these intra-family qualities existed, self concept was more favorable.

This low correlation indicates that a relationship definitely does exist but that it is slight. Evidence will be introduced later to suggest possible reasons for the appearance of the low correlation.

Nine separate variables were introduced, one at a time, into the relationship between family adjustment and self concept. To perform the multivariate analysis, it was necessary first to establish the relationship of each of the third variables to family adjustment, wi the following results:

1. (a) Race. Race was significantly related to family adjustment with family adjustment being more favorable among Caucasians than among Negroes ($X^2=16.45$, $p=.05$). Children from lower-class Negro homes experience more avoidance tendencies or negative valences in their intra-family relations. Among the Negroes, 33 per cent were "homeless," 60 per cent were "normal," and 7 per cent were "homey." In the white group, 26 per cent were "homeless" 61 per cent were "normal," and 13 per cent were "homey."

2. (a) Age was significantly related to family adjustment with younger subjects having better adjustment ($X^2=64.33$, $p=.001$). This is consonant with the findings of Elias (Manual) that family adjustment decreases with age from ages 10 to 19, after which it gradually levels off. This finding may reflect the developmental task of growing away from parents and establishing autonomy and independence, often by reaction against parents and family ties. It may also reflect the broader scope of an older child's acceptance into and understanding of the family problems from which he may have previously been shielded, or which he may have chosen to deny.

3. (a) Size of family was not significantly related to family adjustment. Among those subjects having from none to three siblings, 37 per cent were homeless, 51 per cent were normal, and 12 per cent were homey. The corresponding percentages among those having four to seven siblings were 37 per cent homeless, 53 per cent normal, and 10 per cent homey. In the extreme group of 10 or more siblings, 37 per cent were homeless, 55 per cent were normal, and 8 per cent were homey. Where family income and possessions were not proportionate to family size, the increased tensions arising through parental efforts to maintain subsitence would seem to accentuate disadvantages inherent in a large family system, such as were found by Bossard and Boll (1956). However, it appears that any increased deprivation of the individual is somehow compensated by a consistent feeling of belonging.

4. (a) Order of birth was not significantly related to family adjustment. In descending order, the groups having better family adjustment according to ordinal position in the family were: oldest child, middle child, youngest child, and only child. Although observed differences were not significant, it is worthwhile to note that the only child experienced poorer family adjustment. The increased number of interpersonal relationships in a larger family seems beneficially to affect the child's feelings of homeyness.

5. (a) Marital status of parents was not significantly related to family adjustment. This is consonant with the findings of Burchinal (1964), who compared five types of family groups and concluded that the structure of the family was not the overwhelmingly influential fact in the children's lives. The observed trend in this study was for family adjustment to be highest among those subjects whose parents were living together, lower among those whose parents were separated or divorced, and lowest among those who had one or both parents not living.

6. (a) Family adjustment was not significantly related to the level of father's education. The results indicated a tendency for subjects whose fathers had higher education to have better family adjustment. Among those whose fathers had a seventh-grade education or less, 42 per cent were homeless, 47 per cent were normal, and 11 per cent were homey. Among those whose father had graduated from high school, 37 per cent were homeless, 47 per cent were normal, and 16 per cent were homey.

7. (a) Family adjustment was not significantly related to level of mother's education. No trend in the direction of the relationship was apparent.

8. (a) Family adjustment was not significantly related to father's occupational status, but better adjustment tended to appear in boys whose fathers had higher occupational status. In the lowest occupational level represented, 47 per cent of the subjects were homeless, 49 per cent were normal, and 4 per cent were homey. In the highest occupational level, 43 per cent were homeless, 43 per cent were normal, and 14 per cent were homey.

9. (a) Family adjustment was not significantly related to employment status of the mother, but there was a clear trend for family adjustment to be poorer among those subjects whose mothers were employed outside the home. Among those whose mothers were not employed, 36 per cent were homeless, 52 per cent normal, and 12 per cent homey. In the group whose mothers worked more than 40 hours a week, 46 per cent were homeless, 48 per cent were normal, and 6 per cent were homey.

The second stage of the analysis required an evaluation of the relationship between each of the third variables and self concept. These were the findings: No significant relationship, and no discernible trend in the relationship, were found between self concept and three of the variables tested, namely, father's education, age of the child, and order of birth.

Although the level of the mother's education was not significantly related to self concept, better self concept of the child and higher education of the mother did tend to be associated. This, of course, was in the expected direction. Of those whose mothers had a seventh-grade education or less, 11 per cent were in the lowest self concept group as divided for analysis, and 23 per cent were in the highest group. Those subjects whose mothers graduated from high school included 9 per cent in the lowest group and 26 per cent in the highest group in the self concept categories.

The relationship between self concept and most of the other variables tested tended to be surprisingly in the opposite direction from that expected. Mean self concept scores were slightly higher among subjects whose mothers were employed outside the home than among those whose mothers were housewives. In the group whose mothers were unemployed, 12 per cent were in the lowest self concept category and 23 per cent in the highest. Corresponding percentages for those whose mothers worked more than 40 hours weekly were 11 and 24 respectively.

Although the relationship was not significant, the mean self concept scores were higher for subjects from disrupted families than from intact ones.

An inverse relationship tended also to appear between self concept and father's occupational status. Mean self concept scores were slightly higher among those subjects whose father had a lower occupational status. In the highest occupational level represented, 19 per cent of the subjects were in the lowest self concept group and 16 per cent in the highest. In the lowest occupational level, 8 per cent were in the lowest self concept category and 33 per cent were in the highest.

Size of family was not significantly related to self concept, but there was a marked trend toward more favorable self concept as the size of the family increased. Among those subjects having none to 3 siblings, 11 per cent were in the lowest self concept group and 16 per cent were in the highest. Those who had 10 or more siblings included 9 per cent in the lowest self concept rank and 33 per cent in the highest.

It is likely that the greater the number of individuals in one's intimate environment who regard one positively, the greater the reinforcement one finds in reflected attitudes for considering oneself to be characterized be desirable traits. Sibling interaction may be equally as important in fashioning of self concept as parent-child interaction is thought to be.

Race was significantly related to self concept (X^2=43.36, p=.001) with Negroes having more favorable self concepts than Caucasians. This self concept differential is an anomalous finding in view of the relationship existing between race and family adjustment.

Three explanations of this finding may be tendered. The most plausible of these explanations is that both groups in this study represented the lower class. Self concept may be formed primarily on the basis of intra-family and intra-racial referents rather than broader social or inter-ethnic ones. The lower-class Negro in the South may view himself more favorably because of the majority of those with whom he has intimate contact occupy a similar social position. The lower-class white, however, holds a more inferior status in relation to the average white person in his community.

A second reasonable explanation is that the recent civil rights emphasis has predisposed the American lower-class Negro to exaggerate his own sense of self-worth. He may be claiming for himself a desired level of approved traits on the basis of his ethnic origin rather than an actual level based on his individual self-perception.

A third factor which could help explain the Negro's higher self concept rating is suggested by the research of Riley (1965), who found that males with low masculine self concept exhibited a higher rate of overtly masculine behavior than did those with a high masculine self concept. If the Negro male is unsure of his masculinity this uncertainty would tend to be expressed in compensatory overtly male behavior. High self-ratings on traits which connote maleness, as well as the general practice of boasting, may be indicative of such behavior which serves to disguise personal feelings.

There is ample evidence to suggest that the lower class adolescent male has an unrealistic view of himself and his attributes. Of the 732 respondents, 22 per cent ranked themselves in the highest possible way on each of the 35 trait words reflecting self concept. In other words, 22 per cent obtained the highest possible rating on the self concept scale.

When certain categories of subjects were considered individually an inverse relationship seemed to appear between family adjustment and self concept. For example, Negroes showed poorer family adjustment and higher self concepts. Older subjects had poorer family adjustment and higher self concepts than younger ones. Subjects in larger families had poorer family adjustment and tended also to have a higher self concept score. Poorer family adjustment was experienced by those children from disrupted families, but they also had higher self concepts than those from intact families.

Although there appeared to be a negative correlation between the primary variables when they were viewed in this way, such was not the case. When the relationship was observed within each category of subjects, in every case the correlation was positive, although frequently quite low. This suggests that subjects who lacked favorable family relations were unrealistic in their self appraisal. The result would be a lessening of the observed correlation. It is believed that the weak correlation which was observed may reflect the need of such a child to seek self-aggrandizement in fantasy more than it reflects the effect of family adjustment upon self concept.

In stage three of the analysis, the data were divided into categories of the third variable and the primary relationship between family adjustment and self concept was tested within each of the categories. Of the nine third variables tested, only one, father's occupational status, significantly affected the primary relationship.

When data were stratified in terms of father's occupational status, the primary relationship within the two status levels were significantly different from each other (Z=3.20, p=.01). When the father held a higher level job, there was a stronger relationship between family adjustment and self concept.

Far from answering any really significant questions, this findign has only raised questions which have not been resolved. Since father's occupational status was not significantly related to either family adjustment or self concept, it was anticipated that it would merely be an internal replication variable, within the categories of which the original would merely be reproduced. Since it proved to be a variable which could specify the conditions under which the strength of the primary relationship could be altered, a different rationale must be provided for its occurrence. These are the facts upon which reasoning must be based:

(1) In testing the relationship between third variables and family adjustment, every outcome occurred in the expected direction. Those factors which should, theoretically, lead to a greater feeling of acceptance and love in the family, do, in fact, appear to have such an effect.

(2) The majority of the third variables considered produced an unexpected result with regard to self concpet. For example, subjects from disrupted homes had higher self concept scores than those from intact homes, and those whose fathers were in the lowest occupational group had higher self concept scores than those whose fathers ranked higher occupationally.

(3) More than any other variable considered in this study, father's occupational status reflected the level of living and family. Those subjects whose fathers occupied the lowest job levels represented the hard-core poverty group to a greater degree than any other category of subjects.

(4) In the lower occupational level group, the primary relationship between family adjustment and self concept virtually disappeared. In the higher level group, the correlation was twice as high as in the total sample.

On the basis of this evidence, a tentative conclusion has been drawn which can only be confirmed or refuted by additional research. At this point it appears that in the lower class groups who suffer the greatest degree of economic deprivations and its corollaries, the meaning of the family for the individual member may be lost. Family relations do not appear to have the same effect on such an individual as on those even slightly more economically advantaged.

Perhaps for those individuals whose situation is least desirable the defense of denial become complete. Not only may they live in a dream world with regard to an understanding of themselves, but also may have the ability to disassociate themselves emotionally from painful family relations.

An "attitude toward father" score was compiled from responses to 34 FAT items referring specifically to the attitude of subjects toward their father. A comparison of these scores with self concept scores produced a non-significant correlation of .04, indicating virtually no relationship between the favorableness of a subject's attitude toward his father and his level of self concept.

An "attitude toward mother" score was similarly obtained and the correlation sought between these scores and self concept scores. A zero correletion was observed.

By dividing the summated score of one set of attitudes toward parent statements into the other, a quotient was obtained indicating preference for one parent. In the total sample, and in every single category of subjects analyzed, the mother was shown to be preferred. However, no significant relationship was observed between parental preferences and level of self concept.

The primary relationship between family adjustment and self concept was found to be significant within the following categories of subjects:

Category	Level of Significance
Negro	.01
White	.001
Older age	.001
Small family	.001
Large family	.01
Middle child	.001
Youngest child	.01
Intact families	.01
Disrupted families	.001
Low education of father	.01
Low education of mother	.001
High occupational status	.001
Unemployed mother	.01
Employed mother	.01

Although a significant relationship between family adjustment and self concept was repeatedly observed, the strength of the correlation was always slight. Therefore, the evidence in this study does not strongly support the view that family relations, or the feelings of an individual toward his family, are important determiners of self concept.

There is, however, a serendipity factor present in these findings. Self concept is usually reported higher under those conditions which are believed to be most detrimental to it. Poor family adjustment may dispose an individual to over-rate himself on desirable personality traits as a compensatory defense against the feelings he actually experiences. It is the investigator's belief that the true relationship between family adjustment and self concept has been masked by the exaggerated self concept reports of extremely homeless individuals.

If this tentative conclusion could be corroborated by further research, at least three implications are clear and deserving of attention:

(1) Lower-class adolescent boys urgently need specialized professional help in facing, understanding, and accepting themselves. Achievement is hampered by perpetual self-deception, and fostered by self-knowledge and self-awareness.

(2) The lower-class adolescent boys who exhibit the most socially alienating form of behavior are the ones who may be disguising the greatest insecurity in terms of self. The problem is not a lack of socialization but an absence of ego strength.

(3) Self concept is formed on the basis of attitudes by significant others. The interpersonal role of every professional who associates with the lower-class adolescent boy may be strategically more important for him than it would be for other social groups. The major task in equipping the poor child for a rewarding role in society may be the production of an acceptable self.

REFERENCES

Bossard, J. H. S., & Boll, Elasor Stoker. *The large family system.* Philadelphia: University of Pennsylvania Press, 1956.

Brodbeck, A. J., & Perlmetter, H. V. Self dislike as a determinant of marked ingroup-outgroup preferences. *Journal of Psychology*, 1954, 38, 271-280.

Burchinal, L. G. Characteristics of adolescents from unbroken, broken, and reconsituted families. *Journal of Marriage and the Family*, 1964, 26, 44-50.

Cooley, C. H. *Social organization.* Glencoe, Illinois: The Free Press, 1956.

Elias, G. A measure of "homelessness." *Journal of Abnormal and Social Psychology*, 1952, 47, 62-66.

Harris, S. D., Jr. A study of the relationship between the sixth grade students beliefs about Junior High School, his concept of self and others, and his socio-economic status. Unpublished Ph.D. Dissertation, Florida State University, 1961.

Herriott, R. E. Survey research method. In Ebel, R. L., Ed. *Encyclopedia of Educational Research.* 4th ed. New York: Macmillan, forthcoming.

Jourard, S. M., & Remy, R. M. Perceived parental attitudes, the self, and security. *Journal of Consulting Psychology*, 1955, 19, 364-366.

Lefeber, K. The delinquent's self-concept. Unpublished Ed. D. Dissertation, University of Southern California, 1965.

Lewin, K. The level of aspiration theory, in Hunt, J., Ed., *Personality and the behavior disorders.* New York: Ronald Press Company, 1944.

Manis, M. Personal adjustment, assumed similarity to parents, and inferred parental evaluations of the self. *Journal of Consulting Psychology*, 1958, 22, 481-485.

Mead, G. H. *Mind, self, and society.* Charles W. Morris, ed. Chicago: University of Chicago Press, 1934.

Nye, F. I., & Berardo, F.M. *Emerging conceptual framewords in family analysis.* New York: The Macmillan Company, 1966.

Riley, J. E. The self concept and sex-role behavior of third and fourth grade boys. Unpublished Ed.D. Dissertation, University of Florida, 1965.

Silver, A. W. The self concept: its relationship to parental and peer acceptance. Unpublished Ph. D. Dissertation, Michigan State University, 1958.

Spicola, Rose F. An investigation into seven correlated of reading achievement including the self-concept. Unpublished Ph.D. Dissertation, Florida State University, 1960.

Sullivan, H. S. Conceptions of modern psychiatry. Washington, D. C.: William Allanson White Psychiatric Foundation, 1947.

Wylie, Ruth C. The self concept. Lincoln: University of Nebraska Press, 1961.

RELATIONSHIP OF ANXIETY TO EDUCATIONAL AND VOCATIONAL ASPIRATIONS

Beverly Schmalzried,* Ruth J. Dales, and James Walters

Society assumes that youth from economically deprived homes who aspire to become productive workers contributing to the financial well-being of themselves, their families and the entire nation will fulfill their expectations for themselves if given more desirable educational opportunities. Only in recent years, however, has serious attention been given to the educational and vocational goals of young Americans. This is especially true for youth from rural areas.

In a society in which people need money and in which there are many ways of earning it, choice of vocation is a significant decision. Children develop definite, but frequently unrealistic, ideas as to what they want to do when they are adults. Ginzberg (1951) theorized that occupational choice is a function of a developmental process leading chronologically to increasing realism as a determinant of choice. Small (1953) suggested this process is influenced by the emotional adjustment of the individual.

In the lower socio-economic levels, earning a living now and in the future is of primary importance. The anxiety which the culturally deprived adolescent experiences concerning his future is only a part of the total feeling of uneasiness and uncertainty which affects his attitudes toward staying in school and choosing a vocation. Undoubtedly, anxiety has a differential effect on the educational and vocational aspirations of youth. For some, it may serve to motivate youth to achieve success and recognition; for others it may foster unrealistic dreams which are impossible even for their less unfortunate peers. For some it may lead to withdrawal from the educational institution and to unemployment.

The effects of anxiety on aspirations must be considered in relation to other factors which are influencing both aspirations and level of anxiety. Among these factors are economic destitution, crowded housing, a parent absent from the home, an unemployed father, and a mother who works many hours a week. Low socio-economic status has been associated with leaving school before graduation. Researchers also have found students who had withdrawn from school were more often from weak or broken homes. In regard to race differences, Antondusky and Lerner (1959) found Negroes had a higher level of aspiration than whites with comparable low socio-economic background. Such research indicates the need for a greater understanding of the interaction of the many variables which are believed to affect the educational and occupational aspirations of youth.

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The anxiety level of the adolescent, generally considered to be a factor of importance in influencing educational and vocational aspirations, may encourage him to strive for success but it may limit his willingness to risk himself in activities which may bring failure. His anxiety concerning the present may prevent him from assessing realistically the possibilities for the future. Through the process of identification, he may assimilate the goals of those whom he sees as free from the uneasiness which surrounds him in the world of the economically deprived.

The purpose of this research was to study the relationship between anxiety and the educational and occupational aspirations of adolescent males from lower-class families when certain biographical factors were held constant.

Description of Subjects

The 1,020 male subjects were divided into two subsamples on the basis of race with 545 Negro and 475 white subjects. Subjects ranged in age from 13 to 17. The mean age of the Negro group was 14.8 and the mean age of the shite group was 14.2. The eighth, ninth and tenth grades were relatively evenly distributed, with a slightly smaller percentage of tenth graders in each subgroup.

A smaller proportion (58.7 per cent) of the Negro adolescents came from homes in which the parents were living together, while in the white subgroup more than 75 per cent lived in intact families. Of the other white families, 1.7 per cent were separated, 9.1 per cent were divorced, and 11.4 per cent of the homes had one or both parents not living. A considerably larger proportion (22.0 per cent) of the Negro parents were separated but a smaller percentage (6.1 per cent) were divorced. A comparable proportion of white and Negro families were broken by the death of one or both parents.

More than one-half of the Negro adolescents were a middle child in their family, probably because of the large size of the Negro families in this study. For both the Negro and white subgroups the size of the "middle child" group exceeded that of other ordinal positions. Only 4.2 per cent of the Negro and 3.6 per cent of the white adolescents were only children in their families. Approximately one-fourth of the children in each subgroup were the oldest child and a similar proportion, the youngest. Many of the subjects came from large families. Of the Negro subjects, 60.8 per cent came from families of 5 to 10 children. For the white subgroup, the same percentage came from families of 1 to 4 children.

The parents of both the white and Negro adolescents had a limited education. Almost one-third of the fathers in each subgroup had less than an eighth grade education. Slightly less than two-thirds had left school before graduation from high school. Less than 5 per cent of the white fathers and 7 per cent of the Negro fathers had attended college. The educational level of the mothers was slightly higher than that of the fathers. However, only 17.6 per cent of the Negro mothers and 23.3 per cent of the white mothers had been graduated from high school.

Over one-half of the parents were employed in unskilled or semiskilled work. Only 20.1 per cent of the Negro fathers were employed in skilled or professional jobs, however, 54.9 per cent of the white fathers were listed as employed in skilled or professional occupations. Less than 6 per cent of the Negro fathers and white fathers were unemployed.

Less than one-half, or 41.6 per cent of the Negro mothers were listed as unemployed. A larger proportion (60.0 per cent) of the white mothers were not employed outside the home.

Description of Instruments

The Taylor Manifest Anxiety Scale was used for assessing the level of anxiety of the subjects. This scale originally was constructed by Taylor (1953) who has presented information concerning its reliability and validity. The educational and vocational aspirations of the subjects were recorded on an instrument revised from a pre-coded questionnaire (Your Future Plans) developed by Herriott (1963). This questionnaire originally was designed to test hypotheses related to the influence of significant others and self assessment on educational aspirations.

For use with the present sample of economically deprived adolescents, a number of changes in word usage and form were made. The original instrument included a description of eight future educational plans. To this, questions designed to assess the vocational aspirations of the subjects of this study were added.

The background information sheet was designed to provide the following information: the age of the subject, his grade in school, the number of his brothers and sisters, his parents' marital status, the educational level of each parent, and his ordinal position.

Analysis of the Data

During the initial phase of the statistical analysis completed for this study, the anxiety test of each subject was scored using the 6400 computer. The scores obtained were placed on the data cards in raw form and were used in the testing of hypotheses.

The Pearson Product Moment Correlation Coefficient was computed to determine the extent of the relationship between the scores on the Taylor Manifest Anxiety Scale and educational and vocational aspirations. The chi-square test was used to compare two or more independent samples where only nominal level of measurement was obtained. The latter procedure was utilized for the testing of the hypotheses in which a third variable was involved.

Examination of Hypotheses and Discussion

In this study 44 hypotheses were examined. Four were concerned with the relationship between anxiety and the educational and vocational aspirations of white youth and four with the relationship between anxiety and the aspirations of Negro youth. The remaining 36 hypohteses dealt with the effect of nine individual variables upon the relationship between anxiety and educational and vocational aspirations. The Negro subsample and white subsample were treated separately in examining all hypotheses.

> Hypothesis I (a): Anxiety is significantly related to educational plans when race is held constant.

The total score of the subjects on the Taylor Manifest Anxiety scale was compared to their occupational choices on the Herriott Future Plans instrument by means of the Pearson r. This yielded a correlation of .20 for the white sample and .06 for the Negro sample. The former value was significant at the .001 level but the latter was not significant. The hypothesis, therefore, was accepted for the white sample and rejected for the Negro sample. A significant relationship was found between the educational plans and anxiety level of white youth, but not for Negroes. Anxiousness was positively related to the educational plans of white lower-class boys from culturally deprived areas. Boys with higher levels of anxiety were more likely to choose an educational plan involving more years of formal education while their less anxious peers indicated they planned immediate entrance into the work force.

> Hypothesis I (b): Anxiety is significantly related to the social status rank of first vocational choice when race is held constant.

The relationship between the Taylor Manifest Anxiety scores and the McGuire-White social status rating of first occupational choices of the subjects was obtained. The comparison for the white group yielded a value of .13 and for the Negro group a value of -.004 was obtained. The former correlation was significant at the .01 level; the latter was not significant. Although the relationship between anxiety and the social status rating of the first occupational choices was significant, it is important to note that only .017 per cent of the variation in occupational choice was explained by level of anxiety. High anxiety was related to choosing an occupation rated as skilled or professional. However, the relationship between anxiety and occupational choice did not approach significance for the Negro subsample.

> Hypothesis I (c): Anxiety is significantly related to the number of years of schooling planned when race is held constant.

The relationship between the level of anxiety and number of years of schooling planned by the white subjects yielded a correlation of .013. For the Negro subsample this correlation was .09. Thus, the hypothesis could be accepted for the Negro subsample and rejected for the white subsample.

Negro youth characterized as more highly anxious indicated they planned more years of schooling than Negro boys with low anxiety. Highly anxious youth may feel the need for further education to prepare them for an occupation which will increase their chances of having their needs met. They are, perhaps, aware of the barriers which they face which the white youth will not encounter. The relationship between anxiety and number of years schooling planned was negligible for whites.

> Hypothesis I (d): Anxiety is significantly related to the amount of schooling perceived as necessary for first occupational choice when race is held constant.

Negative correlations were obtained from the comparison of the anxiety level of the white and Negro youth with the amount of schooling perceived as necessary for first occupational choice. The value of the white subsample was -.11 and for Negroes, -.14.

For both Negroes and whites the higher the level of anxiety the lower the subject's perception of schooling necessary for first occupational choice. The more anxious students of both races indicated fewer years of schooling were needed for the occupation they planned to enter.

Introduction of the Third Variable

In examining the relationships observed in Hypothesis I (parts a, b, c, and d), it was found that in some cases a significant relationship existed between anxiety (variable X) and aspirations (variable Y_1 and Y_2). The testing of the remaining hypotheses centered upon the way in which the other variables ($Z_1 \ldots Z_2$) affected these relationships.

In the description of this study, the XY relationship refers to the relationship between anxiety and one of the two measures of aspirations (the educational plans and choice of occupation) of the subjects. When a third variable was introduced (in this case a form of Z), four new relationships were formed: (1) the relationship of variable X to variable Z, referred to as a marginal relationship (XZ); (2) the relationship of variable Z to variable Y, also referred to as a marginal relationship, (ZY); (3) the relationship of variable X to variable Y when variable Z is of one state (represented as $XY;Z^a$);

and (4) the relationship of variable X to variable Y when variable Z is of another state (represented as XY;Z^{b}). Relationships three and four both are known as partial relationships, because each comprises an essential part of the total XY relationship. In the examination of some hypotheses, more than four relationships existed when the Z variable was subdivided into more than two states.

When Z exists in only two states the combination of relationships can be expressed in equation form (Herriott, to be published) as: (XY) = (XY;Z^{a}.) (+) (XY) (ZY)
The above equation symbolizes the relationship between the independent and dependent variable as equal to the sum of this relationship in each category of the third variable, plus the product of the relationship of the third variable to the dependent variable. This equation is a formalizing rather than a mathematical one and can take many forms to help clarify the effect which each third variable has upon the primary XY relationship.

In examining each of the hypotheses considering the effect of the third variable, the procedure below was followed:

1. The significance of the relationship between the third variable and the independent variable and the relationship between the third variable and the dependent variable was determined by means of chi-square analysis.

2. The data were subdivided into categories of the third variable, and within each subcategory the Pearson Product-Moment Correlation was used to test for the significance of the relationship between the dependent and independent variables.

3. The measures of correlation obtained were converted to Z scores and tested to determine if the correlations for the subcategories were significantly different from each other.

For the purposes of computing chi-square values to examine remaining hypotheses, three categories of anxiety were designated: high, medium, and low. Those subjects in the upper one-third of the anxiety distribution, from 40 to 19 on the Manifest Anxiety Scale, were classified in the high anxiety group, and those scoring from 12 to 3 in the low anxiety group. The percentage in each group was: high, 32.6 per cent; medium, 30.8 per cent; and low, 36.8 per cent.

A number of variations in the formalizing equation is possible. The most frequent model appearing in this study was the one in which there was no relationship between the X and Z and X and Y variables.

The third variable was seen to be unrelated to either of the others. In this case the investigator would expect the XY relationship to be reproduced within each state of the third variable. In order to determine if a significant difference did occur between the various XY relationships, in each state of the third variable the correlations were converted to Z scores and tested.

> Hypothesis II (1a): The relationship between anxiety and educational plans of white lower-class adolescents is not significantly affected by number of siblings.

The number of siblings of the subjects was obtained from the background information sheet. The number for the white group ranged from 0 to 18. Utilizing a chi-square analysis, the number of siblings and level of anxiety were unrelated. However, educational plans and number of siblings was significantly related. A larger number of siblings was associated with less ambitious educational plans. One-half of those with seven or more siblings did not plan to go on to school after high school graduation as compared to 27.2 per cent of those with no sibling or one sibling. The percentage in each group who planned to graduate from college was: 0-1 sibling, 48.1 per cent; 2 siblings, 37.3 per cent; 3 siblings, 46.9 per cent; 4 siblings,33.4 per cent; 5-6 siblings, 31.2 per cent; and 7 or more siblings, 25.2 per cent.

The relationship between anxiety and educational plans was not affected by the number of siblings in the subject's family, therefore, the hypothesis could not be rejected.

> Hypothesis III (1a): The relationship between anxiety and educational plans for Negro lower-class adolescents is not significantly affected by number of siblings.

The relationship between anxiety and the number of siblings also was examined in the Negro sample. The chi-square value obtained was significant at the .05 level. As the number of siblings increased, the percentage falling in the high anxiety group also increased. For those with 0-4 siblings, 24 per cent were in the low anxiety group, 44 per cent were in the medium anxiety group and 32 per cent in the high anxiety group. However, among Negroes number of siblings was not related to educational plans. Thus the hypothesis was not rejected. Among Negroes the relationship between anxiety and educational plans was not significantly affected by number of siblings.

> Hypothesis II (1b): The relationship between anxiety and educational plans of white lower-class adolescents is not significantly affected by birth order.

Birth order was introduced as a third variable to determine its effect upon the primary relationship between anxiety and educational plans. Four categories of birth order were designated: oldest child, middle child, youngest child, and only child. Utilizing a chi-square analysis the relationship between anxiety and birth order was found to be not significant. In all four categories, a smaller proportion of the subjects were in the high anxiety than in the low or medium category.

The order of birth into the family appears to have no significant effect on the educational plans of lower-class adolescents. In the "only child" group the number of cases was too small to warrant comparisons. Forty-two per cent of the "middle-child" category, 27 per cent of the "oldest child" category, and 39 per cent of the youngest children indicated they planned no post high school training. Approximately one-third of each group expected to graduate from college. One-third of the "oldest child" group and slightly less of the other two birth order groups planned one to two years of college and vocational training.

Correlations between level of anxiety and educational plans for the oldest child, middle child, and only child group were significant, the first two at the .01 level and the third at the .05 level. Only in the youngest child category were the two primary variables unrelated.

> Hypothesis III (1b): The relationship between anxiety and educational plans for Negro lower-class adolescents is not significantly affected by birth order.

The third variable, birth order, was significantly related to one of the primary variables, educational plans, at the .02 level. A smaller proportion of those in the "oldest child" group did not plan post high school experience in a college or vocational school. Over 40 per cent of the subjects in each birth order planned to graduate from college. Fewer youngest children planned vocational training or one or two years in college. Birth order was not related to the other primary variable, anxiety score, on the Taylor Manifest Anxiety Scale.

> Hypothesis II (1c): The relationship between anxiety and educational plans of lower-class white youth is not significantly affected by age.

The effect of age on the relationship between anxiety and educational plans of white youth was examined by determining the relationship between each of three variables. By chi-square analysis, it was determined that age is not significantly related to anxiety level but is significantly related to educational plans at the .01 level. Twenty-one per cent of the 13 year olds, 39 per cent of the 14 year olds and 38 per cent of the 15 year olds, and 37 per cent of the 16 year olds were not planning on any post high school training. As the age of the respondents increased, the number who said they planned to graduate from college decreased.

No significant relationship was observed between anxiety and age.

> Hypothesis III (1c): The relationship between anxiety and educational plans of lower-class Negro youth is not significantly affected by age.

The effect of age on the relationship between anxiety and educational plans also was examined for the Negro subsample. In this sample no significant relationship was found between the third variable, age, and either of the primary variables, anxiety and educational plans.

In all of the age groups studied except the 16-year-olds, approximately one-half of the adolescents were planning to graduate from college. Almost none planned to leave high school before graduation and get a job or go into the service. Percentages within the age groups who planned to begin working or go into the military service immediately after high school ranged from 15.5 for the 16-year-olds to 20.8 for the 17-year-olds. A smaller percentage of each age group planned to attend a four-year college than planned to attend a two-year college.

A negative relationship was found to exist between the anxiety level and educational plans of Negro 16- and 17-year-olds. The more highly anxious were less likely to indicate they planned to attend and graduate from college. No significant difference was found between the correlations obtained in the various age groups. Hypothesis III (1c) was not rejected. The relationship between anxiety and educational plans was not found to be significantly affected by age.

> Hypothesis II (1d): The relationship between anxiety and educational plans of white lower-class adolescents is not significantly affected by grade.

The first step in examining the effect of grade on the relationship between anxiety and educational plans of white youth was to compute the chi-square values for the relationship between anxiety and grade and educational plans and grade. No trend in anxiety by grade was recognizable. Approximately one-third of the 8th grade students fell in the high, medium, and low anxiety categories. A smaller percentage (33.6 per cent) of the 10th graders than 9th graders were in the low anxiety group. Of the remaining 10th graders, 40.6 per cent were in the medium anxiety range and 25.8 per cent were in the high anxiety group.

No significant relationship was observed between educational plans and grade. Forty-four per cent of the 8th graders planned to enter the work force before or immediately after high school graduation, 20 per cent were planning some type of vocational training or college experience and 36 per cent planned to graduate from college. The percentages of 9th and 10th graders in each group were similar, however, an equal number (38.4 per cent) of the 10th graders were planning on working after some high school and graduating from college.

> Hypothesis II (1e): The relationship between anxiety and educational plans of white lower-class adolescent males is not significantly affected by level of their father's education.

The effect of the level of the father's education on the primary relationship XY was investigated. Level of father's education was not significantly related to either level of anxiety or educational plans. Hypothesis II (1e) was, therefore, not rejected. The relationship between anxiety and educational plans is not significantly affected by level of father's education.

> Hypothesis III (1e): The relationship between anxiety and educational plans of Negro lower-class youth is not significantly affected by level of father's education.

Of those subjects whose fathers had a high school education, 26 per cent were in the low anxiety group, 41 per cent were in the medium range of anxiety and 33 per cent in the high range. For the "less than 7th grade" group, the percentages were 23, 27, and 40.

The educational plans of the subjects were significantly related to the number of years of education completed by their fathers. Eighteen per cent of those whose fathers had graduated from high school planned to terminate their education with high school graduation, 30.9 per cent indicated they planned to attend one ot two years of college or a vocational school, and 51.3 per cent planned to graduate from college. Though the number of fathers who had attended college was small, the trend in this group was toward college attendance. The majority of the "less than high school education" group planned college attendance, however, the percentages varied from 26.4 per cent for those whose fathers had finished the 9th grade and left high school to 60.4 per cent for those whose fathers had completed the 8th grade.

> Hypothesis II (1f): The relationship between the anxiety and educational plans of white lower-class adolescent males is not significantly affected by level of mother's education.

A chi-square analysis was used to compare anxiety and level of mother's education. No relationship was observed between level of mother's education and anxiety. Level of mother's education was, however, related to educational plans. Twenty-five per cent of the mothers who had received an 8th grade education or less had sons who expected to graduate from college while 43 per cent of the mothers who had graduated from high school had sons with this expectation. Of the subjects whose mothers had finished the 8th grade or less, 52 per cent planned to graduate from high school or drop out before finishing. The comparable percentage of those from homes in which the mother had a high school education was 25 per cent.

The subjects were dichtomized into two groups: those whose mothers had less than a high school education and those whose mothers had graduated from high school and had possibly received some further schooling. For both groups a significant relationship was observed between anxiety and educational plans. Hypothesis II (1f) was not rejected. The level of the mother's education did not significantly affect the relationship between anxiety and educational plans.

> Hypothesis II (1g): The relationship between anxiety and educational plans of white lower-class adolescents is not significantly affected by their mothers' occupational status.

The McGuire-White rating of the mothers' occupation was related to the subjects' level of anxiety. A chi-square test analysis yielded a value which was significant at the .05 level. A larger proportion of those subjects whose mothers were employed in skilled or semi-skilled jobs and positions of higher occupational status had low anxiety scores. As occupational status of job decreased, level of anxiety tended to increase. Over one-half of the mothers who were employed held skilled or semi-skilled jobs. Of the subjects whose mothers were in the skilled jobs, 55.2 per cent evidenced low anxiety, 24.1 per cent evidenced medium anxiety and 20.7 per cent scored in the high anxiety group.

The relationship between mother's occupational status and educational plans of the adolescents was not significant. Thus, in Hypothesis II (1g), the relationship between anxiety and educational plans is not significantly affected by mother's occupational status, could not be rejected.

> Hypothesis II (1h): The relationship between anxiety and educational plans of white lower-class adolescents is not significantly affected by their fathers' occupational level.

In testing Hypothesis II (1h), the correlation between anxiety and educational plans in each of the occupational categories was determined. The data were dichtomized into high and low occupational levels. Those subjects whose fathers were employed in professions or skilled trades were placed in the high group and those in semi-skilled work in the low group.

Hypothesis II (1h) could not be rejected. The fathers' occupational levels did not appear to be affecting the relationship between anxiety and educational plans to a significant degree in the white sample.

Educational plans were compared to father's occupational level and a significant relationship was observed. The trend was toward a positive relationship with educational aspirations rising as father's occupational status increased.

Of the subjects in the skilled category, 36.7 per cent planned no post-high school education, 33.3 per cent had future plans for vocational or college experience, and 40 per cent planned to graduate from college. In the semi-skilled group, 30.7 per cent did not plan to attend college or school, 24.3 per cent planned to continue their education after high school but not graduate from college, and 45 per cent indicated they planned to graduate from college. The percentages for the unskilled group were 38.4 per cent, 32.9 per cent, and 28.6 per cent.

> Hypothesis III (1h): The relationship of anxiety to educational plans for the Negro lower-class males is not significantly affected by father's occupational level.

The relationship between anxiety and father's occupational status was not found to be significant at the .05 level, when the fathers' occupational status was classified according to the McGuire-White Index of Social Status. The percentage in the middle anxiety group increased as the occupational status of the father increased. No trend was noted for the low anxiety group.

A significant relationship was observed between father's occupational status and educational plans. Those subjects whose fathers were employed in managerial or skilled occupations more frequently indicated they planned to attend college or vocational school. Only 13 per cent of those whose fathers were in managerial positions indicated they would not receive post-high school training, as compared with 26 per cent of those whose fathers were working at an unskilled occupation. Almost 60 per cent of those whose fathers were skilled indicated their future plans included college education.

Hypothesis III (1h) was not rejected because the relationship between anxiety and educational plans of Negro lower-class boys was not significantly affected by father's occupational status.

> Hypothesis II (1i): The relationship between anxiety and educational plans of white lower-class adolescents is not significantly affected by parents' marital status.

For purposes of statistical analysis three categories of marital status were designated: living together, separated or divorced, and one or both parents deceased. Approximately one-third of the subjects in each category were in each of the low, medium, and high categories of anxiety. Thus, anxiety was found to be independent of the marital status of parents. Similarly, the educational plans of the youth was found to be independent of the marital status of their parents.

Therefore, marital status of parents was not found to be a factor affecting the relationship between anxiety and educational plans and Hypothesis II (1i) cound not be rejected.

> Hypothesis III (2a): The relationship between anxiety and first occupational choice for Negro lower-class adolescents is not significantly affected by number of siblings.

For the Negro samples, there was a significant relationship between the number of siblings and anxiety. Number of siblings was not related, however, to first occupational choice.

For those subjects with 10 or more siblings, as level of anxiety increased, the McGuire-White rating of their occupational choice increased, indicating high anxiety is associated with lower vocational aspirations for this group.

> Hypothesis III (2b): The relationship between the anxiety and occupational choice of Negro lower-class adolescents is not significantly affected by birth order.

In the Negro sample, no relationship was observed between either of the primary variables, i.e., anxiety and occupational choice, and birth order. The relationship between anxiety and birth order is elaborated under Hypothesis II (1b).

For the middle child group, of which there were 286 subjects, highly anxious subjects were more likely to choose occupations of low status. This relationship was not observed for the oldest child, youngest child, and only child. On the basis of these findings, Hypothesis III (2b) was not rejected. Birth order did not significantly affect the relationship between anxiety and occupational choice.

> Hypothesis II (2c): The relationship between anxiety and occupational choice of white lower-class adolescents is not significantly affected by age.

Thirteen through seventeen-year-olds were included in both the Negro and white samples. For the white group, age was found to be related to the Y variable, occupational choice. Older subjects had lower vocational aspirations as measured by the McGuire-White rating of their rirst occupational choice on the Future Plans questionnaire. The relationship between age and anxiety was discussed with Hypothesis II (1c). The two variables were found to be unrelated. Therefore, Hypothesis II (2c) could not be rejected.

> Hypothesis II (2d): The relationship between anxiety and occupational choice of white lower-class adolescents is not significantly affected by grade level.

In the white sample, occupational choice was significantly related to grade level. Students in grade 10 had higher vocational aspirations than students in grades 9 and 8. Anxiety was not, however, related to the other primary variable, grade level.

The relationship between the anxiety and occupational choices of white adolescent males was not significantly affected by grade level. Hypothesis II (2d) was not rejected. In the eighth and ninth grade samples and in the total sample, low anxiety was associated with low vocational aspirations.

> Hypothesis II (2e): The relationship between anxiety and occupational choice of white lower-class adolescents is not significantly affected by the father's educational level.

The fathers' educational level was found to be related to the subjects' choice of occupation. Of those whose fathers had a high school education, 46 per cent desired to engage in professional or managerial occupations, 47 per cent in skilled trades, and 7 per cent in semi-skilled or unskilled labor. A higher educational level for the subjects' fathers was associated with more ambitious vocational goals. However, the third variable, fathers' educational level, was not related to anxiety.

The relationship between anxiety and educational plans was not significantly affected by level of father's education so, therefore, Hypothesis II (2e) could not be rejected.

> Hypothesis II (2g): The relationship between anxiety and occupational choice of white lower-class adolescents is not significantly affected by mothers' occupational status.

In examining an earlier hypothesis, the third variable, mothers' occupational choice was found to be related to both of the primary variables, anxiety and occupational choice. Mother's occupational status was positively related to the adolescent's vocational aspirations. The sons of mothers employed in skilled or semi-skilled occupations had higher vocational aspirations than sons of mothers employed in unskilled trades. Most of the subjects' mothers were employed in one of these three categories. The unemployed mothers' sons aspired to lower occupational status than any other group.

Other variables involved in the testing of these hypotheses were number of siblings, birth order, mothers' education, fathers' occupation, and marital status of parents. None of these variables significantly affected the relationship between anxiety and occupational choice.

The remaining hypotheses were tested and in each case, no significant relationship was observed in the XY relationship or in the partial XY relationship for each state of Z. In addition, no significant relationship existed between the primary variables, anxiety and educational plans, or occupational choice and the third variable.

The unrealistic nature of their vocational choices further substantiated the idealstic approach of these early adolescents. They have survived the most vulnerable, dependent years of their lives within their financially unstable families and were somewhat removed from the serious business of providing for themselves and a family. Their dreams still held the possibility of coming true.

In examining the relationship between anxiety and three aspects of educational and vocational aspirations, weak but positive relationships were observed. As the level of anxiety increased the ambitions of the subjects increased. More anxious students chose vocations of higher social status requiring more years of education. Negative correlations were observed for the relationship between anxiety and number of years of schooling perceived as necessary for first occupational choice.

Two explanations for this latter finding appeared warranted. Anxious students may tend to underestimate the barriers to occupational success, thereby increasing their own chances for attaining these goals. The lack of consistence between this finding and those discussed earlier may be a result of lack of knowledge on the part of the adolescents about the educational requirements for many vocations. Since most of the parents of these youth were working at jobs requiring little or no training, they may have been unaware of the amount of or type of preparation needed for other jobs. Many of the subjects were living in small towns where the range of occupations was limited and post high school education nonexistant.

None of the nine demographic variables appeared to affect the relationship between anxiety and educational plans or occupational choice to a significant degree. The low correlations for the total group coupled with the reduced sample size of the subcategories of the third variable made it unlikely that significant differences would be observed. Significant relationships between the primary variables were observed in some of the subgroups.

In the examination of the relationships between the primary variables, mothers' occupational status was significantly related to the anxiety level and occupational choice of the white adolescents. Higher occupational status for the mother was associated with a lower anxiety level of the adolescent but with increased vocational aspirations. It is suggested that many of the home factors which would reduce the anxiety of the adolescent would at the same time heighten his educational and vocational aspirations. This could be the basis for the weak but positive correlations which were observed.

Other variables which were related to educational plans were fathers' education for the Negro sample and mothers' education for the white sample. Fathers' education for the white group was positively related to occupational choice. These findings suggest that higher parental education and occupational status heighten the level of the adolescent's occupational and educational aspirations.

The educational plans and vocational choices of the adolescents in this study could be termed "unrealistic." Their goals were more out of reach than those of Lott's Kentucky sample (1963.) The Negro subjects tended to be less realistic than the whites. Seventy-seven per cent of the Negro subjects planned to graduate from college. Over 50 per cent indicated they would like to enter a professional or managerial occupation. The percentages for the whites in these two categories were 33 per cent and 26 per cent. Negro youth may need to over-compensate for their present position to a greater extent than the white youth. A number of the Negro adolescents indicated they planned to become professional basketball or football players or entertainers. These fields, presently open to this minority group, carry with them large financial rewards. Boys of this age would be more familiar with and idealize to a greater degree Negro sports heroes and entertainers than Negroes in skilled or semi-professional occupations.

Factors other than anxiety appeared to be of primary importance in considering the educational and vocational aspirations of Negro and white youth from economically deprived areas.

REFERENCES

Antondusky, A. & Lerner, J. Occupational aspirations of lower-class Negro and white youth. *Social Problems*, 1959, *27*, 132-138.

Bishop, Carol; Davis, Blanche; Harper, Jane; and Payne, Virle. *Vocational and educational goals of rural youth in Virginia*, Virginia Polytechnic Institute, Bulletin 568, September, 1965, Blacksburg, Virginia.

Ginzberg, E., Ginsberg, S. W., Axelrod, S., & Herme, J. L. *Occupational choice*. New York: Columbia University Press, 1951.

Herriott, R. E. Survey research method. To be published in Ebel, R. L. (Ed.), *Encyclopedia of educational research*, 4th ed. New York: Macmillan, forthcoming.

Lott, A. J., & Lott, Bernice. *Negro and white youth. A psychological study in a border-state community*. New York: Holt, Rinehart and Winston, Inc., 1963.

McGuire, C., & White, G. D. The measurement of social status. Research paper in human development no. 3 (Rev.). University of Texas, Austin, 1955.

Small, L. Personality determinants of vocational choice. *Psychological Monographs General and Applied*, 1953, 47, No. 35.

THE FAMILY ADJUSTMENT OF CULTURALLY-DEPRIVED ADOLESCENT MALES

Doris W. Hewitt,* Ruth J. Dales, and James Walters

Numerous studies have indicated that the most serious problems of low-income families are those which are the direct result of insufficient money. Many of the males who head these families qualify for only menial work which provides inadequate compensation to maintain their families. Although it appears that oftaining further education would be the solution to such occupational difficulties, many low-income youth are not academically motivated. The parents of low-income youth characteristically have little formal education (Chilman, 1964); and not infrequently this is related to the parents' lack of appreciation for education. As a result, their children are not encouraged to do well in school or to remain in school any longer than required by law. Even when poorly educated parents appreciate the value of education and strive to impart this appreciation to their children, their lack of education makes it impossible for them to provide educational assistance at home when their children require it. The parent's own cultural deprivation makes it difficult for them to expose their children to various cultural stimuli which are important in the learning process.

Recent research indicates that low socio-economic status families are often one-parent families (Chilman & Sussman, 1964; Clarson, 1965) and Negro families (Bernard, 1966). When one parent is absent, the parent who is left with the children faces additional responsibilities and is likely to experience increased financial burdens. If the parent who is present is the mother, she is often forced to work outside the home because of financial reasons even if she prefers not to do so (Chilman & Sussman, 1964).

Studies show that there is a high proportion of separations and divorces among low-income marriages (Bernard, 1966; Riessman, 1962), and there is evidence that low-income adolescents perceive their parents as having more marital problems (Clarson, 1965; Hanley, 1965). Research by Nye (1957) indicates that low-income adolescents have greater difficulty than middle-income adolescents in adjusting to their parents and to the family situation. In many instances the low-income father seems to be a weak figure and therefore an inappropriate model for his children. Such fathers may fail to motivate their children, and they may embarrass their children because they do not meet society's expectations.

Family Adjustment Problems

Among the more important studies concerned with the understanding of family adjustment is the work of Elias (1949a, 1949b), who studied

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soldiers who adjusted poorly to military life in an effort to determine what characteristics distinguished these men from those who were better adjusted. The men who had difficulty in adjusting to army life seemed to experience general and pervasive homeless feelings which could be traced back to homeless family situations while they were growing up. Elias concluded that family adjustment "is probably the main factor that goes to make up a general ability to adjust." He used the terms "family adjustment" and a phenomenon which he called "homeyness" interchangeably, because he believed they were interrelated.

Homeyness is defined as an individual's feelings that he is drawn to his family group and its members and that the family group and its members are positively drawn to him. Homey feelings are characterized by love, warmth, and harmony. On the other hand, homeless feelings are cold, hateful, and full of friction. Homelessness has been defined as an individual's feeling that he is moving away from the family group and from its members and that the family group and its members desire to move away from him (Elias, 1949a; Elias, 1949b).

Elias attempted to discover variables which contribute to the development of intrafamily homey feelings, and he reported in subsequent studies that homeyness was not significantly related to urban, suburban, or rural residence; to the nationality of the subject's parents; nor to religious preference. However, it was significantly related to the age of the subjects and to the parents' level of income in cases of extreme poverty (Elias, 1949b). The adolescents whose parents were of low income tended to experience more homeless feelings than adolescents from middle-income families. This finding suggests several possibilities. Homeyness may be related to economic security or to variables which are commonly associated with economic security, such as parental level of education, employment, and social prestige.

Purpose

In light of the findings cited above, an investigation was designed to determine whether the family problems reported by culturally-deprived youth are related to homey or homeless feelings. Specifically, the purpose of this study was to examine the family problems perceived by white and Negro youth of low socio-economic status in relation to their feelings concerning homeyness and family problems to certain personal and familial variables.

Description of the Subjects

The present study included 526 white males and 587 Negro males whose ages ranged from 13 to 17. They had a mean of 5.3 siblings, 4.1 for the shite subjects, and 6.4 for the Negro subjects. The mean IQ of the white subjects was 103.6 and that of the Negro subjects was 19.4. A gradual decrease in IQ among the Negro youth and a rapid decrease in IQ among the white youth was observed as age increased. The mothers of the males of both races had a mean educational achievement of 9.3 grades, or 1.6 grades more than their husbands.

A total of 38.2 per cent of the white mothers and 61.7 per cent of the Negro mothers were gainfully employed. Seventy-seven per cent of the white youth and 59 per cent of the Negro youth were from intact homes.

TABLE 1

DESCRIPTION OF SUBJECTS BY RACE

Variable	White (N=526)		Negro (N=587)		Total (N=1113)
	N	%	N	%	
Subject's grade in school					
8th	186	35.4	207	35.3	393
9th	191	36.3	201	34.2	392
10th	149	28.3	179	20.5	328
Socio-economic status					
Upper-lower	340	64.6	260	44.3	600
Lower-lower	125	23.8	209	35.6	334
Unknown lower	61	11.6	118	20.1	179
Marital situation of parents					
Living together	408	77.6	347	59.1	755
Separated	12	2.3	126	21.5	138
Divorced	46	8.7	28	4.8	74
Neither parent living	5	0.9	3	0.5	8
Mother not living	10	1.9	27	4.6	37
Father not living	44	8.4	49	8.3	93
No response	1	0.2	7	1.2	8

TABLE 1 - Continued

Variable	White (N=526)		Negro (N=587)		Total (N=1113)
	N	%	N	%	
Number of siblings					
None	16	3.0	7	1.2	23
1-2	158	30.0	57	9.7	215
3-4	156	39.7	115	19.6	271
5-6	97	18.4	128	21.8	225
7-9	76	14.5	188	32.1	264
10-12	18	3.4	60	10.2	78
13-21	3	0.6	9	1.5	12
No Response	2	0.4	23	3.9	25
IQ of subject					
75-79	0	0.0	44	7.5	44
80-89	37	7.0	195	33.2	232
90-99	143	27.2	172	29.3	315
100-109	159	30.2	69	11.8	228
110-119	103	19.6	17	2.9	120
120-129	31	5.9	3	0.5	34
130-133	3	0.6	1	0.2	4
Not tested within last five years	50	9.5	86	14.7	136

Instruments

Two of the instruments which were administered in the larger research project were utilized in this study. Since the purpose of the present study was to examine the relationship between family problems and a sense of homeyness toward the parental home, a Family Problems Checklist and the Elias Family Adjustment Test were used.

The Family Problems Checklist: The Family Problems Checklist was developed by a committee of the Southeastern Council on Family Relations, and was later modified by a panel of apecialists from the Florida State University, the University of Georgia, and the University of North Carolina. The checklist was revised for use with adolescents, and the number of items was reduced. The modified instrument was pretested and a measure of reliability of .89 was obtained utilizing a split-half technique.

The checklist consists of 75 items concerning family problems. The subjects were asked to respond to each item by checking "yes", "sometimes", or "no". There was a possible range of scores of 75 to 225.

Many of the items on the Family Problems Checklist concern family problems which are similar to each other. For this reason, 19 items which seemed best to represent the various problems mentioned in the checklist without overlapping were chosen for further study. An effort was made to select items which dealt with specific problems rather than items regarding broad problem areas, in order to avoid overlapping items. Items which the review of literature indicated to be important in intrafamilial relationships and adjustment and items about which additional knowledge would appear to be most useful were selected. The frequency distribution of the Family Problems Checklist was examined in order to select items which were discriminating, i.e., items which had not evoked identical responses from nearly all the subjects.

The Family Adjustment or Homeyness Test. The Family Adjustment or Homeyness Test discriminates exceptionally well between the secure and the insecure, the adjusted and the maladjusted, delinquents and non-delinquents, and several other dichotomous groups. The test has been used successfully with people of different ages, including adolescents. Elias found that homeless scores tend to increase through the adolescent years, and that males are more homeless than females at all ages (Elias, 1954). Evidence concerning the reliability and validity of the Family Adjustment Test has been presented by Elias (1954). In reviewing the data concerning the reliability and validity of the instrument, Ellis (1959) has concluded that the test is useful in that it has great predictive value and "measures sever aspects of home life and attitudes which few other paper and pencil test try to assess." Homeyness-homelessness scores were obtained from the Family Adjustment Test accoring to the method used by Elias. Possible scores range from 114 to 570, with the lower scores indicating more homey feelings.

Results

The curve of family problem scores for each race are presented in Figure 1.

The number of family problems perceived was examined in relation to certain personal and familial variables. The following were significantly related to the number of family problems reported: race, the number of siblings, whether or not the home was intact, and the source of family income. The levels of significance of these relationships among subsamples, i.e., the white subjects and the Negro subjects, the subjects from the upper-lower status families, and those from lower-lower status families, are presented in Table 2.

The white subjects reported fewer family problems than the Negroes. In general, the subjects who had a smaller number of siblings reported fewer family problems than those with a large number of siblings. The subjects who were from intact homes reported fewer problems than the subjects who were from broken homes, and those whose homes were broken by divorce reported fewer family problems than those whose homes were broken by separation or death. Among the Negroes, the boys whose parents were living together reported a greater number of problems than those whose parents were divorced. The subjects from families with a weekly income had fewer problems than those whose family income was on a monthly basis.

The curve of the homeyness-homelessness scores of each race are presented in Figure 2.

These scores were examined in relation to the same personal and familial variables, and the following ones were significantly related to homeyness: race, age, the marital status of the parents, and the occupational rankings of both the father and mother (Table 2). The white boys experienced a greater number of homey feelings than the Negro boys. The younger subjects experienced a greater number of homey feelings than the older subjects. In general, the white boys whose homes were intact experienced a greater number of homey feelings than those whose homes were broken by separation, divorce, or death. On the other hand, the Negro subjects whose parents were divorced experienced a greater number of homey feelings than those whose homes were intact and those whose homes were broken by separation or death. Among the subjects of lower-lower socio-economic status, those boys whose fathers had jobs with more prestige and higher compensation experienced a greater number of homey feelings than those whose fathers had jobs involving menial labor. Among the white subjects, those whose mothers had more desirable jobs experienced a greater degree of homeyness than those whose mothers had less desirable jobs.

Of the nineteen items which were selected from the Family Problems Checklist for more detailed examination, thirteen were significantly related to homeyness among one or more of the subsamples. The significant relationships between these individual items and homeyness-homelessness are presented in Table 2.

Subjects who reported that the main person in the family does not know how to do the type of work that would enable him to obtain

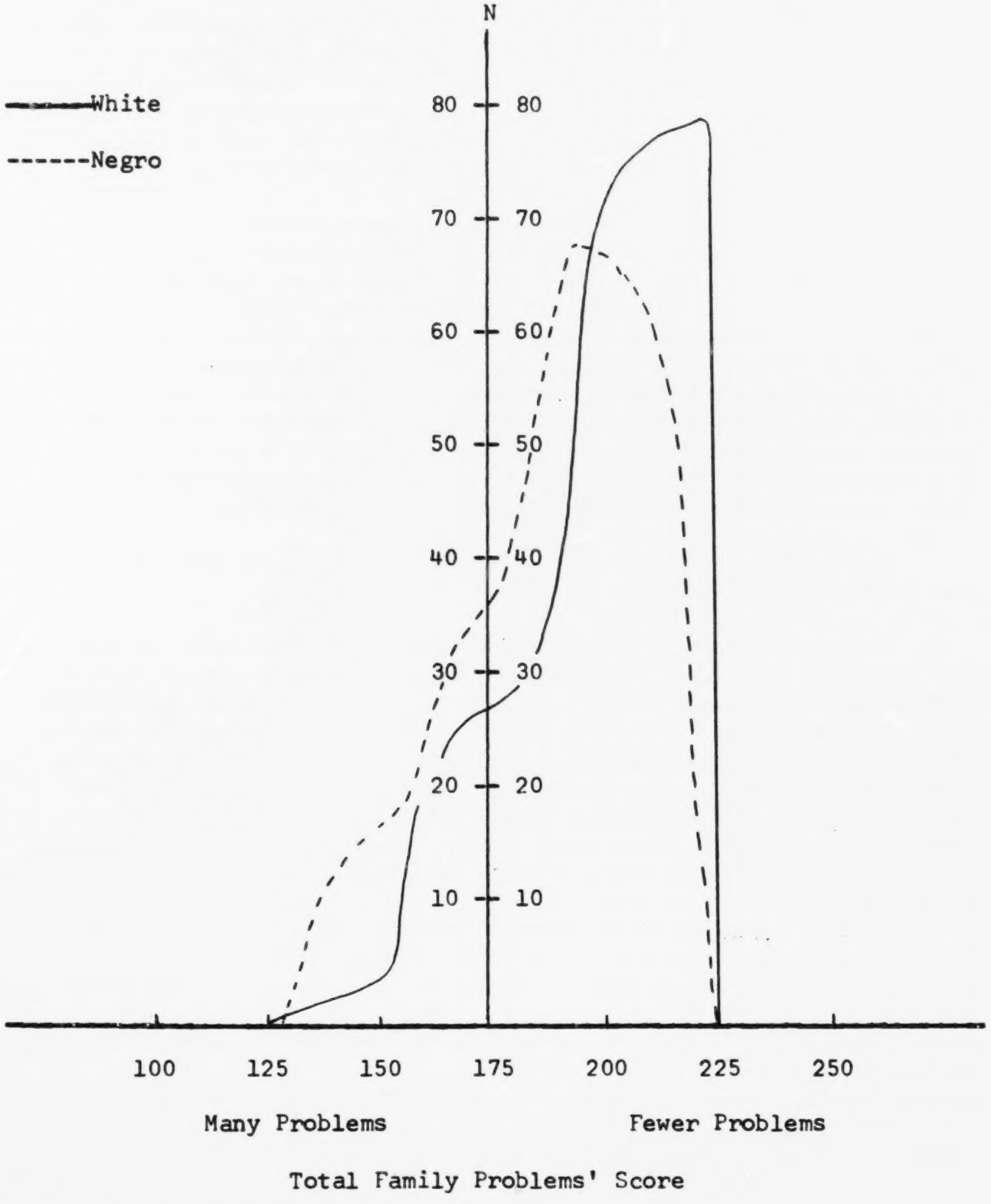

Fig. 1 Curve of total family problems' scores

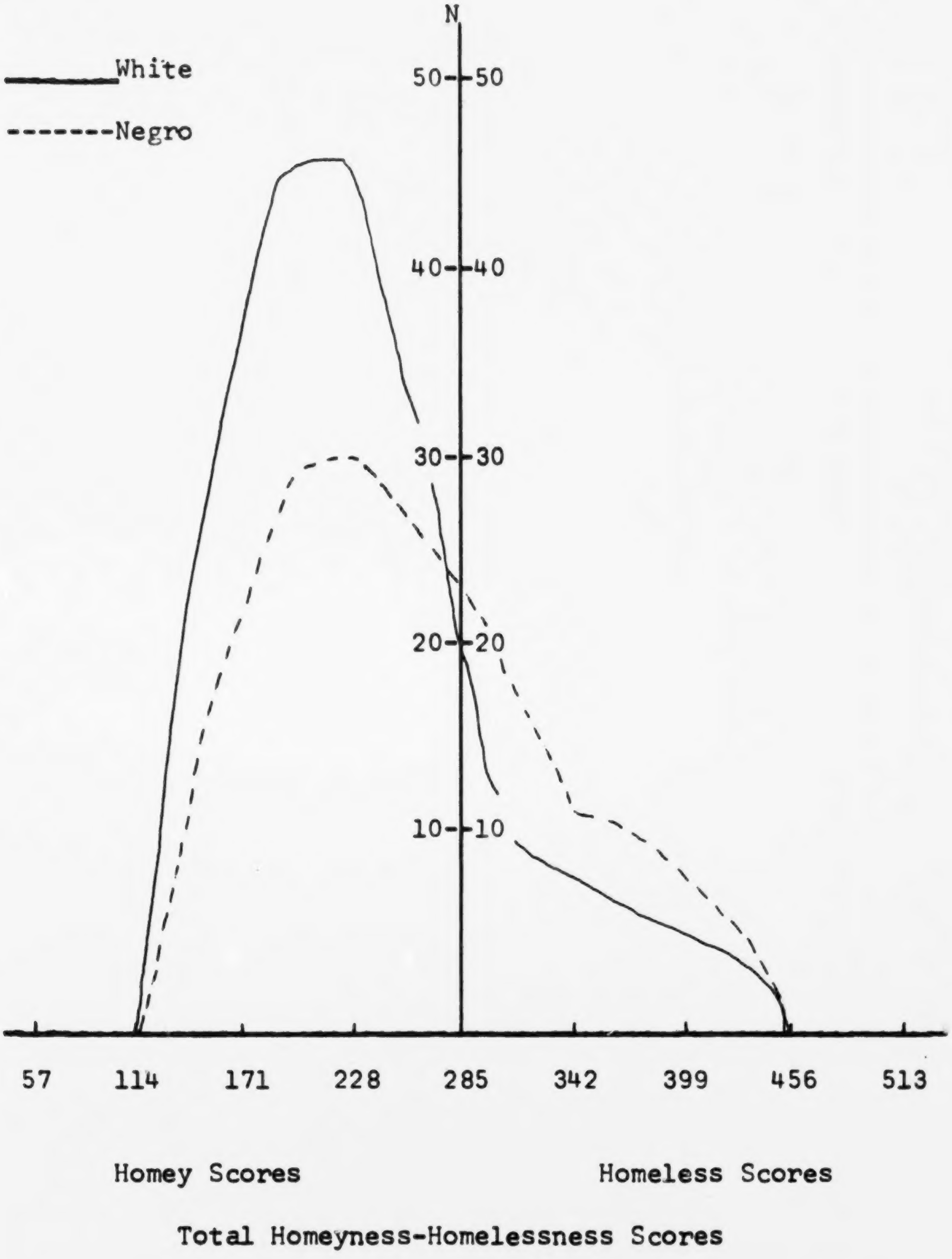

Fig. 2 Curve of homeyness-homelessness scores by race

TABLE 2

SUMMARY OF SIGNIFICANT RELATIONSHIPS

Variable	Level of Significance for Subsamples			
	White Subjects	Negro Subjects	Upper-lower	Lower-lower
Relationship between number of family problems perceived and:				
Race of subject	--	--	.001	.01
Total number of siblings	.01	.05	.001	.05
Marital status of the parents	.001	--	.001	.05
Source of family income	.001	--	.05	.05
Relationship between homeyness and:				
Race of subject	--	--	--	.001
Age of subject	.05	.05	.05	--
Marital status of parents	.05	--	--	--
Father's occupation	--	--	--	.05
Mother's occupation	.02	--	--	--
Relationship between homeyness and:				
Stability of family income	.05	.001	.001	.01
Adequacy of family income	.001	--	.01	.01
Adequacy of housing	.05	--	.01	--
Parents enjoying doing things together	.001	--	.001	.01
Parents having similar religious beliefs	.001	.001	.001	.001

TABLE 2 - Continued

Variable	Level of Significance for Subsamples			
	White Subjects	Negro Subjects	Upper-lower	Lower-lower
Parents having enough time tp spend with subject	.001	--	.01	.01
Parents' Attitudes towards son's friends	--	--	.05	--
Parents' willingness to listen to children's problems	.001	--	.001	--
Family Closeness	.001	.01	.001	.05
Irregular family church attendance	--	--	.05	--
Difficulty in getting along with sister(s)	--	.05	--	--
Difficulty in getting along with mother	.001	--	.05	--
Someone in the family being nervous and worried	.01	.05	.05	--
Relationship between family problems' score and homeyness-homelessness score	.001	.001	.001	.001

steady employment experienced more homeless feelings than subjects who did not report this problem. The adolescents who indicated that their family income is insufficient and that their housing is inadequate experienced more homeless feelings than those who did not report these difficulties. The boys who perceived that their parents enjoy doing things together had more homey feelings than those who reported that their parents did not. Much more homey feelings were experienced by subjects who believed that their parents have similar religious beliefs than by those who reported that their parents have quite different religious beliefs.

The boys who reported that their parents have too little time to spend with them or that their parents are unwilling to listen to their children's problems had more homeless feelings than those who did not indicate having either of these problems. The subjects who felt that their parents approved of their friends had more homey feelings than those who reported that their parents thought their friends were a bad influence on them.

The subjects who reported that the members of their families are close to one another experienced more homey feelings than those who reported they were not close. The boys who felt that irregular family church attendance was a problem had more homeless feelings than those who did not perceive this as a problem. Those boys who indicated that they have difficulty in getting along with female members of the family had more homey feelings than those who did not have such difficulty. The boys who reported that some member of the family is often nervous and worried had less homey feelings than those who did not indicate that they had this problem.

There was an overall Pearson correlation coefficient of -.45 between the number of family problems perceived and homeyness-homelessness. This correlation indicates that the youth who perceived more family problems had less homey feelings than those who perceived fewer problems. The relationship between these two variables is significant beyond the .001 level.

REFERENCES

Bernard, J. Marriage and family among negroes. New Jersey: Prentice-Hall, 1966.

Chilman, C. S. The crisis and challenge of low-income families in the 1960's. Journal of Marriage and the Family, 1964, 26, 39-43

Chilman, C. S., & Sussman, M. B. Poverty in the United States in the mid-sixties. Journal of Marriage and the Family, 1964, 26, 391-395.

Clarson, E. A. Low-income family problems as perceived by adolescents. Unpublished master's thesis, Florida State University, 1965.

Elias, G. The concept and an objective measure of homelessness Studies in Higher Education. West Lafayette, Indiana: Purdue University Press, 1949. (a)

Elias, G. Construction of a test of non-homeyness and related variables. Unpublished doctoral dissertation, Purdue University, 1949. (b)

Elias, G. Manual of Instructions: Elias Family Opinion Survey. Chicago: Psychometric Affiliates, 1954.

Elias, G. Measure of "homelessness," Journal of Abnormal Psychology, 1951, 15, 496-500.

Ellis, A. Review of Elias Family Adjustment Test. In O. K. Buros (Ed.), The fifth mental measurement yearbook. New Jersey: Gryphon Press, 1959.

Hanley, W. J. Family problems of adolescents from lower-class Southeastern families. Unpublished master's thesis, Florida State University, 1965.

Nye, I. Adolescent-parent adjustment: Socio-economic level as a variable. American Sociological Review, 1951, 16, 341-349.

Riessman, F. The culturally-deprived child. New York: Harper and Row, 1962.

EFFECTS OF SCHOOL INTEGRATION ON THE SELF CONCEPT AND ANXIETY OF LOWER-CLASS, NEGRO ADOLESCENT MALES

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It is generally agreed that one of this country's most serious domestic problems lies in the area of race relations between Negroes and whites. Accordingly, this study dealt with the effects of integration on the lower-class Negro adolescent male.

Yarrow, Campbell, and Yarrow (1958) reported that one of the basic social psychological questions posed by integration is what happens when attitudes built up over a lifetime prescribe one course of action while a new situation requires different behavior?

Simpson and Yinger (1965) maintained that "prejudice and discrimination affect not only the attitudes and behavior of minority-group members toward the standards set by the dominant society but also their responses to themselves and their groups (p. 292)."

Katz (1967) concluded, on the basis of his review of the existing evidence, that where feelings of inferiority are aquired by Negro children outside the school, they are likely to have a low expectancy of academic success in the classroom. However, regarding the self concept, Hodgkins and Stakenas (1967) in their study of Negro and white students in segregated high schools found no significant differences in connotative self concept between the two groups, with social class controlled. On the other hand, Maxwell (1967) studied 427 Negro and 325 white adolescent males and found the Negro subjects to have higher self concepts than the white subjects. Other evidence suggests that Negroes as a group tend to have lower levels of self-esteem than do members of the white dominant social group.

In the area of anxiety, the Committee on Social Issues of the Group for the Advancement of Psychiatry (1957) reported that becoming a member of a new group often arouses in the newcomer many fears and anxieties. Holtzman and Moore (1965) in their study of nearly 13,000 Texas youth found that Negro students revealed more symptoms of anxiety than the white students.

Regarding the relationship between anxiety and the self concept, Chow (1965) found that subjects with high self concept tended to have a lower level of anxiety. A later study by Stringfellow (1966) of public school teachers revealed the trend toward high self concept acceptance scores correlating significantly with low manifest anxiety scores.

In view of the paucity of research on integration and its effects on Negro youth, this study was undertaken to determine whether integration of Negro students into predominantly white schools had any significant influence on their self concept and level of manifest anxiety.

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Subjects

The 80 subjects in the present study were taken from a larger sample of approximately 1,200 lower-class Negro and white adolescent males in 28 schools in North Florida. Forty comprised an experimental group and 40 a control group. The experimental group was composed of those youth who transferred from Negro schools into predominantly white schools in North Florida in the Fall of 1966, whereas the control group were those subjects who had always attended an all-Negro achool and continued their enrollment in the same school in the Fall of 1966. The two groups were matched for age, intellectual level, grade level and residence. The subjects ranged in ages from 13 to 18 and were enrolled in grades nine to eleven. All possessed a score of 75 or above on a standardized intelligence test.

Procedure

Assessment of self-concept and anxiety. The data were collected using the Bills Index of Adjustment and Values and the Taylor Manifest Anxiety Scale. The preintegration self concept and anxiety scores were collected during the academic year 1965-66; the postintegration scores during the 1966-67 academic year. To lend some depth to the study, six Negro subjects were interviewed during the latter part of the academic year 1966-67. All of the data were collected in the schools which the subjects attended.

The Mann-Whitney U test was utilized to test for significance of differences in self concept and anxiety between the experimental and control group in the preintegration situation. No significant differences were found in the scores of the two groups.

Statistical Results and Discussion

Hypothesis 1: There is no significant difference in self concept between the experimental group and the control group in the postintegration situation.

The Mann-Whitney U test was used to examine the significance of differences in self concept of the two independent groups. Table 1 shows the results.

As shown in Table 1 there was a significant difference in self concept between the experimental group and the control group after integration. It is believed that lack of acceptance by the white peer group (which seemed to exist in most of the schools studied) might account for this finding. Douvan and Gold (1966) reported that boys are vulnerable to evaluation by others. Caliguri's (1960) study of minority group children found that they were more critical of their physical features than children of majority groups. According to the Committee on Social Issues of the Group for the Advancement of Psychiatry (1957) exclusion of newcomers from the peer group will often create a distortion of their self-image and social perception. The findings of Kroger and Webster (1966) of Negro adolescents in integrated schools suggest that those with white friends had more favorable self-images than those who had no white friends.

TABLE 1

SELF CONCEPT OF EXPERIMENTAL AND CONTROL GROUPS
IN THE POSTINTEGRATION SITUATION

Instrument	N	Group	Median Score	Value	Level of Sig.
Index of Adjustment and Values	27	Experimental	96	Z=-2.63 p= .0086 U=259	.05
	32	Control	103*		

*Higher score reflects a more favorable self concept

Hypothesis 2: There is no significant difference in the level of manifest anxiety between the experimental group and the control group in the postintegration situation.

Table 2 shows the results of the Mann-Whitney U test used to examine the significance of differences in anxiety of the two groups.

TABLE 2

ANXIETY OF EXPERIMENTAL AND CONTROL GROUPS
IN THE POSTINTEGRATION SITUATION

Instrument	N	Group	Median Score	Value	Level of Sig.
Taylor Manifest Anxiety Scale	31	Experimental	21	Z=-1.00 p= .3174 U=409.5	Not sig.
	31	Control	16		

No significant difference was found in anxiety (Table 2) between the two groups after integration. This finding may be surprising to some extent in view of the reasonable assumption that self concept and anxiety are inversely related. It would seem to follow that if the median self concept scores of the experimental group were significantly different from those of the control group, then the median anxiety scores would also be significantly different. However, there was a significant difference in anxiety scores in both the experimental and the control group from the preintegration to the postintegration situation (Table 3).

Hypothesis 3 and 4: There is no significant difference in anxiety scores in the experimental group and in the control group from the preintegration to the postintegration situation.

The Wilcoxon matched-pairs signed-ranks test was used to examine these hypotheses. The results are presented in Table 3.

TABLE 3

ANXIETY OF THE EXPERIMENTAL AND CONTROL GROUPS IN THE PREINTEGRATION AND POSTINTEGRATION SITUATION

Instrument	N	Group	Initial Median	Final Median	Value	Level of Sig.
Taylor Manifest Anxiety Scale	28	Experimental	16	20	Z= -2.78 p= .0054 T= 80.0	.05
Taylor Manifest Anxiety Scale	31	Control	16	18	Z= -2.04 p= .0414 T=144	.05

It would be reasonable to expect an increase in the anxiety level of the Negro subjects after enrollment in the integrated school (Horney, 1945; Sullivan, 1948; Cole, 1962). Holtzman and Moore's (1965) Texas Youth Study revealed that the Negro high school student in the integrated school was more pessimistic and anxious about society and his future in it than the white student. It was also found by the senior investigator, in talks with Negro guidance counselors, that Negro students leaving a Negro school to enter a predominantly white school often experienced alienation from their own racial peer group.

In trying to explain the corresponding increase in anxiety of the control subjects, Lincoln (1960) pointed out that even "the prospect of racial integration is productive of an excruciating anxiety. Every anticipated social change is accompanied by an intensification of anxiety factors, for change, of whatever sort, involves a relationship with the unknown or unfamiliar (p. 281)." Meisner (1961) declared also that school, sex, unpopularity, vocation and future life are major sources of anxiety for all adolescent males.

Hypothesis 5 and 6: There is no significant difference in self concept scores in the experimental and control group from the preintegration to the postintegration situation.

To examine these hypotheses the Wilcoxon matched-pairs signed-ranks test was used. The results are presented in Table 4.

TABLE 4

SELF CONCEPT OF THE EXPERIMENTAL AND CONTROL GROUPS IN THE PREINTEGRATION AND POSTINTEGRATION SITUATION

Instrument	N	Group	Initial Median	Final Median	Value	Level of Sig.
Index of Adjustment and Values	22	Experimental	94	95	T=109	Not sig.
Index of Adjustment and Values	28	Control	97.5	103	Z= 1.80 p= .0718 T=124.67	Not sig.

The self concepts of the experimental and control subjects retained more stability from the preintegration to the postintegration situation (Table 4). It may be concluded that the self concepts of the Negro youth who integrated into the predominantly white schools were not significantly changed. It is possible the number of anxiety-producing factors may have been greater and may not have been related to lack of acceptance or discrimination in the integrated schools. The element of competition, the higher standards, the apprehension over whether graduation was a realistic goal; all of these may have enhanced the anxiety level of the Negro subjects in the white schools while not adversely affecting their self concepts to any great extent.

It is plausible that many of the subjects in the integrated schools found some acceptance in the school situation and had family backgrounds conducive to a healthy self concept. It had been reported to the investigator by a few white guidance counselors that the Negro students during the first year of the desegregation process (1965-66) were perhaps the more militant of their race, motivated by a "trail-blazing" attitude. On the other hand, the second year of school integration (1966-67) witnessed the enrollment of Negro youth who performed on a higher academic level and whose incentives to integrate was to avail themselves of better educational opportunities. Hodgkins and Stakenas (1967) found no difference in the self concepts of Negro and white students in segregated schools. They declared that Negroes and whites live in two different social worlds which influence self concepts; the Negro in his own environment would seem to have realistic self concepts equally as the white in his social world. Yet Douvan and Gold (1966) maintained that all adolescents receive their main sources of satisfaction with school from their social life, their academic achievement, and occasionally their teachers. Thus, there would seem to be some common bases for the self concept of Negro and white youth in spite of their different environments.

Analysis of Interviews

Six subjects were interviewed in May, 1967 to lend greater depth to the statistical findings. Conducted in the school Guidance Counselor's office, the individual interviews were approximately one hour in length.

Three subjects from the experimental and three from the control group were selectively paired on the basis of their having been in the same classroom the previous year in the all Negro school. In addition, the three pairs were matched closely for age, intellectual level and residence. Of the first pair, one subject was in the ninth grade, the other in the tenth. Both subjects of the second and third pair were in the tenth and eleventh grades, respectively. The three subjects from the experimental group attended an integrated school in the same county in which they resided; the control subjects continued their attendence in the Negro school in their community. The interviews are presented in pairs, as they were matched, in order to readily contrast the two subjects. The names, herein of course, are purely fictitious.

Riley R. and Arnold S. Both subjects were 15 1/2, of the same intellectual level and were in the same classroom in the all-Negro school the previous year. Riley transferred to the predominantly white school in his home county in the Fall of 1966. Both expressed satisfaction with their respective school environments and their home situations. Growing up in the same community, Riley and Arnold have known one another for several years. Each conveyed the impression of possessing a fairly healthy self-image; no symptoms of emotional disturbance or overt anxiety were indicated.

Riley and Arnold both aspired to completing high school although the academic indications are that this goal may be difficult for them to attain. Riley is repeating the ninth grade and Arnold is having trouble maintaining passing grades. Riley was guarded in discussing his teachers, his reasons for integrating and in his constructive criticism of his present school. Arnold and his family had discussed the possibility of his transferring to an integrated school but apparently this idea had been dismissed. According to Arnold there was room for improvement in the all-Negro school he attends; "more activity' such as band and industrial arts, better athletic equipment and facilities and agricultural equipment are needed.

Both subjects seemed to lead a normal social life in their community. They are active in their peer groups and prefer sports to "book work."

Their parents seem to want them to obtain as much education as they can although Arnold has been a chronic absentee from school throughout the years. He expressed more loyalty to his family than did Riley, in the way of assuming responsibility for chores and for contributing to their support later on. Riley aspires to become a mortician whereas Arnold expressed an interest in mechanics.

Riley's guidance counselor revealed that Riley's older brother was to be the first Negro graduate from Riley's school. It was learned since the interview that Riley was promoted to the tenth grade in the integrated school but returned to his former all-Negro school in the Fall of 1967. The guidance counselor believed that his return was possibly due to several factors--academic competition, "covert discrimination" and some degree of lack of acceptance by the white peer group at the integrated school.

Arthur S. and Calvin C. Arthur 16 1/2, and Calvin 16-0, both in the eleventh grade, were easy to interview. They were in the same classroom the previous year in the all-Negro school and are in the above-average range of intelligence. Both resided in the same community and are close friends. Arthur transferred into the previously all-white school in the Fall of 1966. In contrast to Arthur, Calvin has spent much of his life away from this community due to his father's having been in the military service for 23 years.

Both subjects seemed to have been reared in stimulating home environments with Calvin having had the added advantage of travel. In contrast to most families in the community, their parents read to them and provided books and other materials in their early years. Arthur's father died when he was nine and the level of living is not as high as it formerly was. Both subjects, serious-minded and studious, have several siblings and appear to enjoy a close family life.

Active in peer group and church activities, Arthur and Calvin gave the impression of being somewhat restless and dissatisfied to some extent with their present situations. Calvin, accustomed to traveling and living in larger communities, expressed a desire to live in a bigger town--"not much to do here." On the other hand, Arthur's unrest seemed to stem mostly from his school situation in which he felt quite discriminated against. He felt a lack of acceptance by the white peer group and also from the faculty. One of his five teachers appeared interested in him, provided individual help when needed and showed "no favoritism."

In spite of the unfavorable situation he depicted, Arthur said he would not return to his former school as he would have to face rejection by his own racial peer group for not being able to "take it." His older married sister who lives out of state had encouraged him to transfer to the integrated school in order to avail himself of a better educational opportunity.

Speaking favorably of his teachers, Calvin felt his school was lacking in facilities and equipment--a gym and library were very important as far as he was concerned. He indicated a desire to transfer to Arthur's school in the Fall of 1967. Both subjects, appearing generally satisfied with themselves in spite of their concerns, expressed hopes of going to college. Both are "B" students in their respective schools.

Billy W. and Kenneth L. Billy W. and Kenneth L, both slightly over 17 years of age, were in the eleventh grade; Billy in the integrated school and Kenneth in the all-Negro school. The previous school year (1965-66) they attended the same all-Negro school, participated in sports together and were good friends. Easy to interview, both subjects were born and reared in this community in which their schools were situated.

In their respective school situations, Billy and Kenneth appeared to be enjoying considerable prestige and a healthy feeling about themselves. Being one of the four-letter athletes at the all-Negro school, Kenneth was a popular member of his group. Billy enjoyed the recognition extended by his racial group in the community for having transferred to the previously all-white school. Although there were some white students still unaccepting of him, Billy felt that this situation would improve with time since more white students accepted him now than at the beginning of the school year. Billy aspired to be the first string fullback on the football team the following year: the principal later remarked that he was an excellent athlete.

Background information revealed that Kenneth lived in a crowded home with his parents and 11 siblings. His father was described by the principal as being a "week-end drunk." In spite of these conditions he was described by the principal as being a confident and well-adjusted youngster. His major difficulty appeared to be in the academic area as he has to work hard for passing grades.

These two subjects seemed to exemplify individuals who are capable of "rising above their environments." Kenneth indicated he will probably attend trade school upon graduation whereas Billy was interested in going to college. The principal, expressing a liking for Billy, said he was accepted by most of the students.

Discussion--Implications for Statistical Findings

Generally, the information and impressions received from the interviews tend to support the statistical findings. It was the observation of the investigator, based on the interviews and his visits to the schools in the study, that lack of acceptance of the Negro student in the integrated school is prevalent--in some schools to a greater degree than others. Furthermore, the Negro youth do not seem to have the cultural background necessary to cope with the academic competition of the previously all-white schools. Consequently, in examining Hypothesis 1 it was not surprising to find a significant difference in self concept between the experimental and control group after integration.

Excerpts from the investigator's interview with Arthur S. are pertinent to the above point. In relating his reasons about the integrated school being harder than his former school he remarked, "the subjects are a little harder, and the students make it harder." He added, "some boys are nicer than others. Some would like to make friends with us (Negro students) but they won't because of their friends (white students)." When asked if any one picked on him he said, "the colored boys don't, but the white boys do." Billy W. remarked to the investigator that some of the white students at his school were prejudiced toward the Negro students and wished that more of them were friendlier to him. He did believe, however, that with time he would gain greater acceptance by the white group. It was noted that Billy W. was an athlete who was proficient enough to make the varsity basketball and football teams.

Kenneth L., the control group counterpart of Billy W., who chose to remain in the Negro school, remarked to the investigator that he was quite satisfied with his school situation. He lettered in all of the school's sports, felt well-accepted by his peers, and was in the "in-group." His statements may reflect the satisfaction of the students who chose not to integrate when they learn of the academic competition and lack of acceptance of Negro students in some of the integrated schools. Arthur S. had been an outstanding student, scholastically, in the all-Negro school but was finding it difficult to maintain a "B" average in the integrated school. He indicated he wished he had not made the transfer but would not return to his former school as he would face rejection by his own racial group for "not sticking it out." It seems quite pertinent to note that Arthur S.'s control group counterpart, Calvin C., reported that he planned to transfer in the Fall of 1967 to the integrated school that his friend Arthur was attending. The investigator has since discovered that Calvin C. is still attending the all-Negro school.

The investigator noted in the Fall of 1967, the return of several subjects in this study to their former all-Negro school and an apparent leveling off in the Negro enrollment of the integrated schools in the study. This was discussed with their guidance counselors whose statements coincided with the investigator's interpretations of this occurrence. When questioned why three subjects in this study returned to the Negro school after attending the white school the previous year she remarked, "they felt out of place over there." Asked it she felt they were discriminated against she nodded and said, "but nothing overt." Even though they were promoted to the next grade in the white school she felt they were happier in the Negro school and could achieve on a higher academic level. Horney (1945) propounded that such an environment blocks the free use of the student's energies and his efforts to be himself. He may react by moving away from the environment, moving against it, or moving with the environment.

Another guidance counselor poignantly stated, "it takes a youngster with a healthy self concept to stay in a white school and like it." She also felt the Negro youngster feels "socially isolated" in the white school. She added that the average Negro does not have the "ego strengths" to cope successfully with the adjustment that school integration requires of the individual. This particular counselor had children in predominantly white schools and was quite sensitive to their anxieties and the problems they faced. However, she felt her children had been fortunate enough tohave the background to compete academically with their white peers.

An examination of Hypothesis 3 showed that the anxiety scores of the experimental group were significantly higher after integration. This was not surprising as there was much evidence suggesting that integration is an anxiety-producing phenomena not only in the school situation but in the Negro's own social milieu. This was borne out by the statements of Arthur S. who said that if integrated Negro students like himself returned to their former school they would be taunted and rejected by their own race for "chickening-out." Several Negro guidance counselors have conveyed these sentiments to the investigator. One remarked that the Negro student attending an integrated school is caught between two opposing forces. He is not socially accepted by the white peer group in the school he attends; he returns to the Negro school at night and on weekends for social and extra-curricular activities and is greeted with such remarks as: "You left us, go back to your white friends. We don't want you over here." This particular counselor felt this was a typical attitude of Negroes toward those who transfer into a predominantly white school in the same community.

Another counselor in a very large Negro school felt that the Negro youngsters who integrate lead an "academically white life, but a Negro social life." Yet they are frustrated in both of these efforts as they find it difficult to compete with the white students academically and are rejected by their Negro peers for having wanted to leave the Negro school.

In examining Hypothesis 6 it seemed reasonable to expect that the self concept scores of the control group would remain fairly stable during the course of this study. The statements of Samual A. and Kenneth L. (of the control group) would seem to be reasonably representative of many Negro youth in all-Negro schools. These two subjects expressed considerable satisfaction with their school situation, their own personal lives and with the attitude of their families toward them as individuals. Their self-image appeared to be satisfying to them and they were not unduly anxious about their present life situations.

Of interest in this regard is the statement of one male guidance counselor in a large all-Negro school: "We are beginning to wonder if we really want integration." He explained that with increased education of the Negro majority, the Negro college graduate who formerly enjoyed considerable prestige, will become one of many such graduates. Hence, some Negroes are afraid of losing their "status quo" or "afraid they will lose their identity."

Katz (1966) aptly remarked that Negro parents, on the whole, don't seem interested in school desegregation--"and not just from fear of reprisals, but simply because school integration isn't something large numbers of Negroes get excited about (p. 20)." He added that unless determined Negro pressure is put to bear, numerically meaningful integration is not likely to occur in the foreseeable future.

Conclusions

The major findings may be summarized as follows:

1. There was a significant difference in self concept between the experimental and the control group after integration. Negroes who entered predominantly white schools revealed less desirable self concepts than those Negroes who remained in Negro schools.

2. There was a significant difference in the anxiety level of both the experimental and control group from the preintegration to the postintegration situation.

3. No significant difference in anxiety was found between the experimental and the control group in the postintegration situation. Furthermore, there was no significant difference in the self concept of the experimental group and the control group from the preintegration to the postintegration situation.

Depth interviews with three subjects in each of the two groups were conducted; generally, the results substantiated the conclusions from the statistical data. Indications are that Negro youth were finding it difficult to compete academically and were not being accepted by the white students as quickly as they may have expected. In addition, it is doubtful if Negro students are able to anticipate realistically the amount of anxiety they might experience in a newly integrated school. It is, perhaps, the belief of many Negro youth and their families that the advantages of transferring into a white school are questionable when one is confronted with unacceptance, social isolation, rebuffs, stiff academic competition and loss of status with one's own racial peer group.

One inherent limitation to this study may have been an element of bias in sampling regarding the experimental group. It is reasonable to assume that Negro youth who transfer into a newly-integrated school possess some unusual motivation and characteristics not found in those who choose to remain in all-Negro schools. A second limitation may center around the fact that the experimental subjects were in attendance in the newly-integrated schools only one year. Would the findings have been the same had they been in attendance two or more years?

REFERENCES

Caliguri, J. The self concept of the poverty child. *Journal of Negro Education*, 1960, *35*, 280-282.

Chow, K. L. *The relationship between anxiety and the self structure.* (Doctoral dissertation, Michigan State University). Ann Arbor, Mich.: University Microfilms, 1965, No. 65-8375.

Cole, Luella. *Psychology of adolescence.* New York: Holt, Rinehart and Winston, 1962.

Douvan, Elizabeth, & Gold, M. Model patterns in adolescence. In L. W. Hoffman & M. L. Hoffman (Eds.), *Review of child development research.* New York: Russel Sage Foundation, 1966, *2*, 469-523.

Group for the Advancement of Psychiatry, Committee of Social Issues. *Psychiatric aspects of school desegregation.* (Report No. 37). New York: Group for the Advancement of Psychiatry, 1957.

Hodgkins, B. J. & Stakenas, R. G. The segregated Negro and self concept: A disparate finding. Unpublished manuscript, The Florida State University, 1967.

Holtzman, W. H. & Moore, Bernice M. *Tomorrow's parents.* Austin: University of Texas Press, 1965.

Horney, Karen. *Our inner conflicts.* New York: Norton, 1945.

Katz, I. Research on public school integration. *Integrated Integration*, 1966, *4*, 15-20.

Kroger, Marie H. & Webster, S. W. A comparative study of selected perceptions and feelings of Negro adolescents with and without friends in integrated high schools. *Journal of Negro Education*, 1966, *35*, 55-56.

Lincoln, E. C. *Anxiety, fear, and integration.* Phylon, 1960, *21*, 281-285.

Maxwell, J. W. The relationship of family adjustment to the self concept of lower-class adolescent males. Unpublished doctoral dissertation, The Florida State University, 1967.

Meisner, S. J. Some indications of sources of anxiety in adolescent boys. *Journal of Genetic Psychology*, 1961, *99*, 65-73.

Simpson, G. E., & Yinger, J. M. *Racial and cultural minorities.* (3rd ed.) New York: Harper & Row, 1965.

Sullivan, H. S. The meaning of anxiety in psychiatry and in life. New York: William Alanson White Institute of Psychiatry, 1948.

Stringfellow, Jackie R. Study of the self concepts and manifest anxiety of selected Georgia teachers with implications for supervision. (Doctoral dissertation, The Florida State University). Ann Arbor, Mich: University Microfilms, 1966. No. 67-6482.

Yarrow, L. J., Campbell, J. D., & Yarrow, Marian R. Interpersonal dynamics in racial integration. E. L. Hartley, E. E. Macoby & T. M. Newcomb (Eds.) Readings in social psychology. New York: Henry Holt, 1958, 623-636.

CREATIVITY IN CULTURALLY DEPRIVED ADOLESCENT BOYS

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Creativity involves the ability to create, originate, or to bring into being. To be creative concerns demonstrating the power to produce original work, as in art, literature, or science. The identification of creative thinking has received increasing attention in recent years because knowledge of factors which contribute to, or detract from, the development of creativity is of inestimable value. Consequently, the identification of these factors during the pre-adult years has been of special interest to all concerned with child development. Creativity, or more specifically creative thinking, is defined here as "seeing things in a new way."

Creativity, intelligence and giftedness have been synonymous terms to most people until recent years. However, even before the turn of the century one researcher (Dearborn, 1898) observed that giftedness in intelligence and giftedness in creativity were not synonymous. Another writer of the same era, (Colvin, 1902) studied "inventiveness" in the English compositions of grade school children. One of his scoring categories was "spontaneity" which referred to imaginative ability. While dissimilarities between intelligence and creativity were observed by some investigators at that time, this observation appeared to be the exception and not the rule.

Although the first work was done nearly seventy years ago, there was little work published concerning creativity until 1950.

The early part of the century was characterized by endeavors to develop instruments for the measurement of intelligence which were used initially to predict academic achievement. Later, they were used with adults during World War I. Standardized tests were devised to measure aptitudes, attitudes, and later, personality factors.

The second factor contributing to the neglect of studying creativity was, paradoxically, related to the "success" of standardized testing. Spontaneity and imagination seemed to defy the process of establishing test norms. The essence of what is sought, in studies of creativity, is that which evades and eludes the conventional. It is that which is referred to as divergent rather than convergent thinking. Thus, the success of traditional evaluative techniques had become a methodological albatross.

A third factor leading to the recent impetus in this area concerns the abrupt threat to American intellectual vanity in 1958. The launching of the Russian sputnik caused reverberations throughout the American educational establishment which resulted in a re-examination of the process of identification, nurture and utilization of talent. Added interest in the discrimination of creativity has been a part of this process.

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Another interest, particularly during the decade of the sixties, concerned the problem of poverty. The pessimistic outlook, "the poor will always be with us," gave way to the query, "what can we do to improve the lot of the poor?" This concern has been demonstrated in the expenditure of vast amounts of public resources for the purpose of eradicating or alleviating the causes of poverty.

Governmental programs in this area have had many facets which have involved both research and action. These programs have ranged from the well known direct grants of public assistance to an expansion of efforts in the employment and educational areas. Public reaction has ranged from criticism to wholehearted enthusiasm.

Interest in creativity and in poverty has developed simultaneously. However, there has been an absence of overlapping. Perhaps this has been logical in that university researchers concentrating on creativity have drawn subjects from typical, accessible middle-class populations. Investigators for whom poverty has been a central concern have focused on more pressing problems. The Headstart projects are illustrative of this latter point.

Torrance (1966) has done a great deal of work on creativity in recent years and has suggested that the creativity tests which he has developed could be used as a means of assessing potentialities that otherwise might go unnoticed. Creativity tests, he believes, are especially useful, "in looking for giftedness in culturally disadvantaged children, children from lower socio-economic classes (and) minority groups" [p. 5].

Purpose

The purpose of this investigation was to identify creative youth in a lower-class, adolescent, male population. Self-concept, family adjustment, anxiety, and intelligence were examined in relation to creativity. An assessment was also made of the relationship between creativity and race, ordinal position, size of family, age, grade, education of parents, and marital status of parents.

Review of the Literature

Getsals and Jackson (1962) reviewed the history of creativity testing which seemed to have been sporadic up until 1950. That year, Guilford (1950) in his presidential address to the American Psychological Association, called for research which would differentiate creativity from intelligence. He called on researchers "to look well beyond the boundaries of the IQ. . .to fathom the domain of creativity" [p. 448].

A survey of the Psychological Abstracts by Getsals and Jackson (1962) revealed 240 articles on creativity or creativeness listed between 1927 and 1959. The first 20 per cent appearing during the first thirteen years with the most recent 20 per cent appearing during the last two years of the period. It has been apparent that interest in creativity has increased rapidly in recent years.

Definitions

Varying definitions for creativity have been given. Rugg (1963) used the terms "create," "discover," "invent," and "originate" synonymously because they all "suggested to him bringing to light something previously unknown" [p. 21]. Scofield (1960) defined creativity as "insight into a relationship of facts which a child never knew before" [p. 5], while Durr (1964) defined it more simply as "seeing things in a new way" [p. 174]. Bartlett (1959) used the term "adventurous thinking" which involved getting away from the main track, "breaking out of the closed system and moving towards more open and less bounded regions" [pp. 96-97]. Simpson (1922) referred to the ability to break away from the usual sequence of thought into an altogether different pattern of thought.

Torrance's (1962) more elaborate definition stated, "creative thinking is the process of sensing gaps or disturbing, missing elements, forming ideas or hypotheses concerning them; testing these hypotheses; and communicating the results, possibly modifying and retesting the hypotheses" [p. 16].

Several writers emphasized the quality of "divergent" in contrast to "convergent" thinking in the identification of creative persons (Guilford, 1950; Getzals and Jackson, 1962; Torrance, 1962). Intelligence tests place maximum value on convergent, conforming thinking while creativity tests are designed to assess divergent, original thinking.

IQ and Creativity

Recognition that creativity and intelligence were not necessarily synonymous goes back to the turn of the century when a Harvard investigator studied the imaginative responses of students and faculty to a series of inkblots (Dearborn, 1898). He reported that some of the poorest records were made by students of a decidedly "intellectual type."

Getzals and Jackson's Creativity and Intelligence is probably the best known effort in this area. Generally, the correlation between the two has been described as very low in the upper ranges of intelligence. Torrance (1962) described the relevant upper range as beginning "around an IQ of 120" [p. 63]. Meer and Stein (1955) concluded there was little relationship beyond the 95th percentile of intelligence.

Kirk (1963) in a critique of the Terman's longitudinal studies of the highly intelligent suggested that there seemed to be a positive relationship between high intelligence and professional and vocational achievement. On the other hand, he thought there was a paucity of creative individuals in the group at mid-life.

Hollingsworth (1942) utilized the longitudinal technique on a small group of individuals with IQ's above 180. She reported that only one-third of the group showed notable signs of creativeness. She described the remainder as having been either moderately creative or appearing to be completely lacking in originality. While superior intelligence may not insure high creativity it was not described as a handicap. Rugg (1963) drew attention to the necessity of formal preparation, or becoming cognizant of the known, as enhancing one's ventures into the unknown.

Givens (1963) proposed that educators and others should speak of two kinds of intelligence. He maintained that adaptive intelligence corresponds to our notions of intelligence as measured by IQ tests. It is analytical and is involved in the problem-solving activities of man. Creative intelligence is concerned with the category of behavior which emphasizes spontaneous expression without regard to the instrumental values of the behavior. Synthesis, originality and divergent thinking are characteristics of this kind of intellectual effort. He maintained that the school, home and society generally encourages habits of scrutiny, but often ignore habits of originality and synthesis. In our efforts to develop highly evaluative attitudes of scrutiny and analysis, critical thinking is given such high rewards that the total effect is the inhibition of, or the extinction of, creative effort.

Tests of Creativity

The various tests of creativity have attempted to differentiate creativity from intellectual factors measured by conventional tests. Torrance (1962) reviewed the various kinds of tests of creativity which had been used on different age groups. Initially the tests involved responses to inkblots and drawings. Later experiments involved evaluation of compositions, word association tests and a greater variety of other tasks. Many, if not most of the tests which have been used recently stem from am elaborate battery developed by Guilford (1951). In his discussion of the importance of divergent thinking in contrast to convergent thinking, Guilford (1956) has referred to divergent thinking as the generation of new information out of known information. He was concerned with designing tests which would measure intellectual fluency, sensitivity to problems, originality, and flexibility of thinking. Fluency was measured by the number of answers given to a question such as: How many different ways can you think of for using a brick? The answers to questions such as: What would happen if everyone in the world would suddenly become deaf? were used to indicate sensitivity to problems. Originality was measured by the number of unusual or clever titles given to short stories. Flexibility measurements involved the number of category shifts in responding to various questions.

Fuqua (1966) studied fourth and sixth grade Negro children. Analyzing the relationship and the differences among measures of creative thinking and other factors, including intelligence, he concluded that 88 per cent of the pupils who scored high on the measure of creative thinking would have been missed had the intellectually excellent group been selected exclusively on the basis of intelligence test scores. Like Getzals and Jackson (1962) before him he found that his high creativity group performed significantly higher on an achievement battery than did his low creativity group.

Stages of Creative Production

Writers on the subject of creativity (Kneller, 1965; Torrance, 1962; Getzals and Jackson, 1962; Durr, 1964) agree that there is a process or sequence of stages through which the individual passes in his creative production. The conclusions concerning these stages have been based upon observations of creative persons as well as upon the analysis by the creative persons themselves. These stages are as follows:

1. Preparation. During this stage the problem is identified and investigated from many different directions.

2. Incubation. The individual may not be consciously engaged in thinking about the problem during this stage. Some type of re-organization of the information seems to be going on, often without the person being aware of it.

3. Illumination. The creator suddenly sees the idea or concept which results in the solution of the problem during this stage.

4. Verification. During this stage the idea or solution which has been obtained is tested to see if it is valid.

Taylor (1959) has classified creativity into graded levels ranging from the simplest level, which is apparent in the work of children, to a very complex level, evident only in the work of a few persons of world renown. He identified these levels as expressive, productive, inventive, innovative, and emergentive.

Expressive creativity is exemplified in the spontaneous drawings of children, and concerns independent expression, disregarding originality and the quality of the product. Productive creativity differs from the expressive level in that realism is heightened as well as the objectivity of the work. *Inventive creativity* concerns new applications of basic ideas and is revealed in most inventions. *Innovative creativity* concerns an understanding of basic principles and the significant modification of these principles. Illustrative are the modifications of Freudian principles by Jung and Adler. *Emergentive creativity* involves entirely new principles and is characterized in the work of such men as Einstein and Picasso. Murray (1959) also argued strongly for the theory of the commonness of creativity in contrast to the idea of creativity being considered a very rare capacity.

Mental Health and Creativity

Research on creativity in recent years was first concerned with the identification of creative children of all ages. Secondly, an examination of other variables associated with creativity was undertaken. Illustrative of the latter were studies examining the relationship between creativity and mental health. Barron (1963), for example, studied the relationship between mental health and creativity among doctoral candidates. He did not find the two characteristics, good mental health and creativity, inconsistent. Hebeisen (1960) found a group of recovering schizophrenics to be impoverished in imagination, inflexible, and lacking in originality. The implications of these results refuted the common misconception that many creative people are mentally unstable.

MacKinnon (1962) reported that the creative persons he studied had strong self-images or self-concepts, were more sensitive and more independent than their peers, made more unconventional responses and had a considerable sense of humor. His creative subjects were also described as more dominant, more autonomous, flexible, and inclined to achieve in surroundings where indipendent rather than conforming behavior is expected. Similarly, Szurek (1959) saw creativity as including a sense of playfulness in adults. Creativity was further described as synonymous with mental health and intellectual integration in contrast to Schisis, or a splitting or cleavage of energy.

While creativity was not associated with mental illness or emotional pathology it was also not synonymous with social acceptance. Getzals and Jackson (1962) reported that teachers preferred the highly intelligent over the highly creative students. They also found a mocking attitude on the part of the creative toward what they call the "All-American Boy." The creative student's desire to emulate his peers was found to be very weak. Torrance (1962) described similar observations from his research.

Self-Concept and Creativity

The relationship between creativity and self-concept was explored by Sisk (1966). She randomly assigned a group of sixth-grade children to one of two treatment groups--one involving self-knowledge exercises and discussion, and the other with nonself-knowledge exercises and discussion. The self-knowledge exercises were related to fluency and flexibility results on creativity measures. High self-concept students attained better scores on measures of originality and flexibility than did low self-concepts students.

The rationale that the creative person has a better self-concept than the non-creative person was not supported by the empirical evidence of Perkins (1966) who studied a population of adolescents. His procedure involved a comparison of "high" and "low" creatives from two intellectual strata (average IQ and IQ of 120+). No significant differences were found in the self-concepts of these groups.

Anxiety and Creativity

The role of anxiety in relation to creative imagination was discussed by Greenacre (1959). She observed that anxiety provoking problems current in the child's life become the subject of the child's play. The role of anxiety in connection with artistic production varies according to the relationship between the personal self and creative self of each individual. Play serves to reduce anxiety, permit further maturational development and provides an opportunity to meet similar disturbances in reality later.

Self Confidence, Peer Acceptance, and Creativity

Kurtsman (1965) studying ninth-grade boys and girls found that his more creative subjects tended to be more adventurous, had a greater tolerance for ambiguity, and were more extroverted than less creative individuals. Although creative boys were more self-confident than less creative boys, no similar differences in self-confidence related to creativity was found in female subjects. An interesting finding on peer acceptance was that more creative boys tended to receive greater acceptance from peers than less creative boys, while the more creative girls were less accepted by their classmates.

Spontaneity and Creativity

The reaction of teachers to spontaneity and initiative of creative students was considered in a symposium reported by Franklin (1959). One of the conclusions concerned the identification of two opposing points of view. While some considered impulsivity as a desirable dimension of personality making for intellectual growth others considered it as a cue for restrictive discipline. Consistent with the latter viewpoint, Torrance (1962) found that creative children received the most nominations for "thinking of the most ideas for being naughty." He suggested that once the creative child gains a reputation for these ideas it is difficult for the teacher or classmate to differentiate his good ideas from the silly or naughty ones.

Torrance has been concerned with the problem of repression of creativity, whether by parent, teacher, peer, or other person. He stated that the evidence was not clear to him as to whether "the abandonment of creativity leads to the disability (behavior problem, neurosis, schizoid withdrawal, etc.) or (whether) the disability in effect destroys or seriously cripples the creativity of the individual" [p. 133].

Sample

The present sample consisted of 183 boys, of whom 109 were white and 74 Negro. The subjects represented 19 different schools in North Florida. They ranged form 14 to 18 years of age and were in the tenth through twelfth grades.

The California Short Form of Mental Maturity (Clark and Tiegs, 1963) was administered during the 1966-67 school year. The subjects were ranked according to IQ and 109 white students and 74 Negro students who were average or superior intellectually were included in the study.

The white subjects were fairly evenly distributed in the tenth, eleventh, and twelfth grades. Most of the Negro subjects were in the eleventh grade (48.6 per cent) with lesser numbers in the tenth (31.1 per cent) and twelfth (20.3 per cent) grades. The majority of the Negro subjects were in the 16 and 17 year age category (79.7 per cent) while the white group was more equally represented in the four are categories.

The boys were primarily from large families. Mean number of children for the families in the white sample was 4.77, while in the Negro sample the mean was 6.58. As might be expected, most of the subjects held the ordinal position of middle child, defined here as meaning they were neither the oldest or youngest child of several siblings. Almost one-fourth of the Negro boys held the oldest child position in the family.

Only two boys, both white reported that both their parents were deceased. Approximately one-fourth of the Negroes compared to one-tenth of the whites reported their parents were either separated or divorced. More of the whites than the Negroes (76.1 per cent to 68.9 per cent) indicated their parents were living together. A much larger proportion of the whites (11.1 per cent) than Negroes

(2.7 per cent) responded that their fathers had died. Only one white and two non-white mothers were reported deceased. The subjects' responses to questions concerning the educational level of their parents revealed, as could have been expected, that the majority of the parents were less than high school graduates. A large number of both Negroes and whites either failed to respond to the item, or responded that they did not know the level of their parents' education. Ignorance of the father's educational level was alleged by more Negroes (37.8 per cent) than whites (31.2 per cent) while the reverse was true (Negroes, 31.1 per cent, whites, 42.2 per cent) concerning the lack of knowledge of the mother's educational level.

Detailed descriptive information of the subjects is presented in Table 1.

Instruments

Three of Torrance's (1966) creativity tests which were described in Guiding Creative Talent were used in this research. These were: Circles Task; Incomplete Figures Task; and Unusual Uses. Since the sample of boys was drawn from the lower socio-economics segment of the population non-verbal tests were sought. The Circles and Incomplete Figures seem particularly fitting. However, one verbal task, Unusual Uses, was included in order that special verbal facility would not be excluded.

Each test was scored for fluency, flexibility, originality, and elaboration. Fluency concerns the number or volume of ideas generated by the subject. Flexibility involves the capacity to shift categories in the responses to a given stimulus. The degree of statistical uniqueness, or uncommonness, is the basis for the originality factor. Elaboration is derived from assessing the number of additional supporting ideas or details which are provided beyond a basic idea.

The sample was such that in all but three schools, eight or f fewer boys were tested in a session. In those schools with larger groups approximately thirty were tested at a time by the senior investigator and one or more assistants. In all instances, the subjects were seated facing the examiner to minimize insofar as possible intentional or inadvertent glancing on a neighbor's test. In practically all instances each boy worked diligently.

The researcher utilized classificatory categories and originality weights which were described by Torrance (1966) was derived by combining his scores for the three creativity tests.

Six other instruments were used for the data on personality and demographic factors. These were: (a) a Background Information Sheet, (b) Taylor's Manifest Anxiety Scale, (c) Herriott's Your Future plans, (d) Elias' Family Opinion Survey, (e) Bills' Index of Adjustment and Values and (f) the California Short Form Test of Mental Maturity.

Analysis of the Data

The total scores on all instruments were placed on IBM cards. The Pearson Product Moment Correlation Coefficient (r) was computed to determine the extent of the relationships between creativity and intelligence, anxiety, family adjustment, and self concept. The sample was divided according to race and the correlations recomputed using an IBM computer. A *t*-test was applied to the values of r to determine levels of significance.

The relationship between creativity and each demographic variable was treated statistically with the chi-square test.

Results

When race was controlled, a relationship was not found between creativity and any of the following variables: self-concept; family adjustment; anxiety; and intelligence quotient. Creativity appeared independent of these personal and familial characteristics.

Although the overall findings were consistent with other research, it appeared that further research with Negro samples would be appropriate. Of the two racial groups in the current research, the Negro adolescents came closer to revealing some relationship between self-appraisal and creative thinking. The correlation between self-concept and one of the creativity subtests (Circles) was .3096 for the Negro subjects. This finding was particularly noteworthy since the Circles subtest was independent of IQ ($r=-.0120$).

Creativity was not related to family adjustment in either racial subgroup. However, it was noted that all of the subjects were within the average range according to the norms for the Family Adjustment Test. An incidental, although expected finding, was that family adjustment was inversely related to anxiety in both groups, and positively related to self-concept among Negro youth.

When creativity and intelligence were considered for the entire sample of 183 boys, a positive relationship was evident ($r=.2237$, $p \leq .01$). This was attributed to the rather broad range of IQ's (85 to 142) under consideration since further computation of the correlations for each of the racial groups resulted in a diminution of relatedness. The ranges of IQ's were less broad for each group, consequently, the relationship of IQ to creativity was statistically non-significant.

The Circles subtest, of the three used to assess creative thinking, was the most valuable from the standpoint of having been the most independent of IQ. The Figures subtest was the most highly related to IQ among the combined subjects. The Uses test was most highly correlated with IQ ($r=.3352$, $p \leq .01$) among the Negroes and therefore, least discriminative between creativity and intelligence. The Uses Test, while a creativity task, is essentially a verbal test requiring a written verbal response. The verbally fluent may not necessarily make a higher score but the verbally limited would certainly make a lower score. The white group represented a slightly higher IQ range and probably had greater verbal facility. Thus, the Uses Test probably measured creativity for the white subjects, while it more nearly assessed limitation of verbal ability among the Negro subjects.

None of the eight demographic variables were associated with creativity. These were race, birth order, family size, age, grade, marital status of parents, and parents' level of education. In order to examine the relationship between creativity and race, the subjects were matched for IQ, age and grade. The 46 subjects obtained from this matching process were ranked according to creativity scores. Twelve Negroes and 11 whites had creativity scores above the median, while 11 Negroes and 12 whites were below the median.

One group of hypotheses which were examined concerned the relationship of creativity to the boys' educational aspirations as well as their perceptions of expectations by their friends and parents. The white youth revealed high positive correlations between their own levels of educational aspiration and their perceptions of what their parents or best friends would expect of them educationally. These ranged from r=.6125 for "Boys' aspirations to friends' expectations" to r=.7449 for "Boys' aspirations to Mothers' expectations." A significant relationship was also found between the white subjects' level of creativity and their aspirations as well as their perceptions of their best friends' expectations of them.

The Negro youth revealed several interesting differences. First, the relationship between the boys' own aspirations and their perceptions of their parents' aspirations for them was positive and significant, although less than for the white youth. Second, there was no relationship (r=.09) between the Negro adolescents' own aspirations and their perceptions of best friends' expectations of them. This was highly inconsistant with the parallel finding (r=.61) for the white subjects. Whether the Negro youth feel alienated from their peers or exhibit greater independence and inner directed behavior are only two questions which deserve further investigation.

The Negro adolescents generally reflected high educational aspirations. While this may seem unrealistic, it also suggests a socially acceptable and feasible solution to the problems of poverty.

This study revealed that many of the boys were quite creative and imaginative in spite of varying levels of anxiety, self-concept, family adjustment and intelligence. Responses to the creativity instruments ranged from those which were barren, constricted, and devoid of spontaneity to others which were clever, original and sparkling with homor. While results suggested that mose of the variables assessed were not significantly related to the subjects' levels of creativity, several areas which were not investigated may be fruitful in future research. Among these are the attitudes of teachers, parents, and peers toward manifestations of creativity and divergent thinking by the subjects.

REFERENCES

Barron, F. *Creativity and psychological health.* Princton: D. Van Nostrand, 1963.

Bartlett, F. *Thinking.* New York: Basic Books, 1959.

Clark, W. W. and Tiegs, E. W. California Short-Form Test of Mental Maturity, 1963 Revision, Level 4, Published by California Test Bureau, Del Monte Research Park, Monterey, California, 1963.

Colvin, S. S. and Myer, I. F. Imaginative elements in the written work of school children, *Pedagogical Seminary*, 1902, *13*, 84-93.

Dearborn, G. V. A study of imagination, *American Journal of Psychology*, 1898, *5*, (9), 183-190.

Derell, G. R. Creativity in education. *The Clearing House*, 1963, *38*, 67-69.

Durr, W. K. *The gifted tudent.* New York: Oxford University Press, 1964.

Franklin, Adele (chr.), Henry, J.; Biber, Barbara & Levinger, Leah. The teacher's role in creativity, Symposium, 1958. *American Journal of Orthopsychiatry*, 1959, *29*, 266-297.

Fuqua, N. V. An analysis of the relationships and differences among measures of creative thinking and selected other factors in educable and less educable groups of Negro children. Unpublished doctoral dissertation. Wayne State University. 1966.

Getzals, J. W. & Jackson, P. W. *Creativity and intelligence: explorations with gifted students.* New York: John Wiley & Sons, 1962.

Givens, P. R. Creativity and the gifted child. *Educational Theory*, 1963, *13*, 128-131.

Greenacre, Phyllis. Play in relation to creative imagination. *Psychoanalytic Study of the Child*, 1959, *14*, 61-81.

Guilford, J. P. Creativity. *American Psychologist*, 1950, *5*, 444-454.

Guilford, J. P. , Wilson, R. C., Christensen, P. R., & Lewis, D. J. *A factor analytic study of creative thinking. I hypotheses and description of tests.* Los Angeles: University of Southern California, 1951.

Hallman, R. J. The commonness of creativity. Educational Theory, 1963, 13, 132-136.

Hebeisen, A. A. The performance of a group of schizophrenic patients on a test of creative thinking. In E. P. Torrance (Ed.) Creativity: third Minnesota conference on gifted children. Minneapolis: Center for Communication Study, University of Minnesota, 1960, 125-129.

Hollingsworth, Leta S. Children above 180 I.Q. New York: World Book Company, 1942.

Kirk, S. A., Weiner, Bluma B. Behavioral research on exceptional children. Washington: The Council for Exceptional Children, National Education Association, 1963.

Kneller, G. F. The art and science of creativity. New York: Holt, Rinehart, and Winston, 1965.

Kurtzman, K. A. A comparative study of higher, middle, and lower creative adolescents in terms of peer acceptance, attitudes toward school and personality characteristics. Unpublished doctoral dissertation, Syracuse University, 1965.

Marksberry, Mary Lee. Foundation of creativity. New York: Harper & Row, 1963.

Mackinnon, D. W. (Ed.) The creative person. Berkeley, California: University of California Press, 1962.

Meer, B. & Stein, M. L. Measure of intelligence and creativity. Journal of Psychology, 1955, 39, 117-126.

Murray, H. A. Vicissitudes of creativity. In H. H. Anderson (Ed.) Creativity and its cultivation. New York: Harper & Brothers, 1959.

Patrick, Catherine. What is creative thinking. New York: Philosophical Library, 1955.

Perkins, S. A. A comparative analysis of the congruence of high creative and low creative high school students. Unpublished dissertation, University of Oregon, 1966.

Rugg, H. Imagination. New York: Harper & Row, 1963.

Scofield, R. W. A creative climate. Educational Leadership, 1960, 18, 5.

Simpson, R. M. Creative imagination, American Journal of Psychology, 1922, 33, 234-243.

Sisk, Dorothy Ann. The relationship between self-concept and creative thinking of elementary school children: an experimental investigation. Unpublished doctoral dissertation, University of California at Los Angeles, 1966.

Szurek, S. A. Playfulness, creativity and schisis. American Journal of Orthopsychiatry, 1959, 29, 667-683.

Taylor, C. W. The 1955 and 1957 research conferences: the identification of creative scientific talent. American Psychologist, 1959, 14, 100-102.

Taylor, I. A. The nature of the creative process. In P. Smith (Ed.) Creativity: an examination of the creative process. New York: Hastings House, 1959, pp. 54-61.

Torrance, E. P. Guiding creative talent. Englewood Cliffs, New Jersey: Prentice-Hall, 1962.

Torrance, E. P. Directions manual and scoring guide: Torrance Tests of Creative Thinking. Princton: Personnel Press, 1966.

Torrance, E. P. Torrance Tests of Creative Thinking: norms technical manual. Princeton: Personnell Press, 1966.

RELATIONSHIP OF SCHOOL ACTIVITY PARTICIPATION TO EDUCATIONAL AND VOCATIONAL ASPIRATIONS

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School activities are designed to contribute to the fulfillment of the objectives of secondary education. Participation in such activities provides the student not only the pleasure and relaxation that comes from engaging in sound leisure activities, but also opportunities for self development by expanding his knowledge, discovering new ideas, and developing intellectual and vocational interests.

That participation in school activities contributes to the development of the student as a person and helps him to learn to behave as a responsible citizen in a democratic community has been widely accepted by educators. The school activities program, organized on the democratic principle that all students should be reached and that all should have equal opportunities of participation, has slowly grown in scope and significance. Nevertheless, in spite of its growth and wide acceptance within the school community, the program organized around 15 major types of activities (Frederick, 1959) does not reach all students.

The extent of the students' participation in the program has been studied using different approaches. Unfortunately, research has indicated that young people who are likely to benefit most from the social experiences in the activity program have fewer opportunities to participate (Graham, 1964). It has been found that one of the most striking characteristics of the school dropout has been his lack of participation in extra curricular activities (Tesseneer, 1958). It appears that a general apathy syndrome characterizes the lower-class dropout and that it is manifested in general indifference not only to his involvement in group activities but also in other aspects of his overt behavior.

In 1954 Thomas, in a study involving from 2,000 to 3,000 students in the Chicago area, reported that "not one person who dropped out before completing the third year (in high school) had engaged in even one activity, and that 89% of those who finished had . . ." (Thomas, 1954). Livingston (1958) also found dropouts to have shunned participation in extra curricular activities. In his study, lack of participation in the school activities program had the highest correlation with dropping out of school than any of the other 24 related characteristics studied.

Evidence from research has indicated that several variables other than the nature of the activities included in the program appear

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to be influential in determining selective participation. Although the literature reviewed is not comparable in terms of the rigerousness of the methodology used, all seemed to agree that the following variables affect the extent of the students' interest and degree of participation in leisure time recreational activities: student's intellectual abilities, the size and composition of their families; their socio-economic status, race, and the area of residence (Cameron, 1948; Thomas, 1954; Pauley, 1958; Behring, 1966; Bourgon, 1967; Clift, 1950).

Research in the area of leisure time activities has been focused mainly on adults. According to Goldstein (1967) relatively little attention has been paid to youth in this area. A number of researchers have found that there are significant social class differences with respect to the ways various adult groups use their free time (White, 1955; Clarke, 1956; Scott, 1957; Wright and Hyman, 1958). Goldstein (1967) suggested that such differences relate mainly to styles of life rather than to social or economic factors per se. Such interpretation would indicate that one might expect similar differences among adolescents with different social backgrounds.

A greater understanding of the relevance of leisure time recreational activities in the lives of lower-class youth is needed, particularly since participation in such activities contributes to the clarification of the adolescent's search for identity and enables him to clarify his role in life through experiences leading, among other things, to furthering the development and clarification of vocational interests.

The adolescents who will soon become adults are naturally concerned with the future. In a rapidly changing society the necessity of having money to pay for everyday needs makes it imperative that adolescents be given assistance in clarifying vocational goals, for occupational choices become highly significant in determining the quality of their future lives.

Needed assistance could be given in the form of guidance as well as through exposure to experiences that will broaden their horizons and thus facilitate choice. Some of this assistance could come through contacts with peers and teachers in the informal atmosphere of an extra curricular activity, or a well organized out-of-school activity. Yet, most of the studies reviewed by Tesseneers (1958) indicated that students from low socio-economic backgrounds leave school before graduation and that while in school, they do not participate in extra curricular activities.

This alarming growth in the inability of schools to retain lower-class students constitutes a pressing educational and occupational problem. Cognizance of the social implications of this problem has grown, and as a result, increased interest has been manifested in trying to increase the retention power of the schools. Many educators believe that determining ways which might encourage potential dropouts to complete high school is one of the most important issues of education today as Schreiber (1963) pointed out.

Not all attempts to deal with the problem have been successful. Because of the relevance and complexity of the situation different approaches should be explored in an attempt to arrive at satisfactory solutions. It is suggested that a positive a priori approach whereby emphasis would be placed on understanding the qualities that characterize the students who remain in school is likely to prove more fruitful than the use of a post factum approach whereby emphasis is placed on the study of the variables which characterize the adolescents who left school before graduation. This last approach is the one most frequently reported in the literature reviewed.

Purpose

The purpose of this study was to investigate the nature of lower-class male adolescents' participation in leisure time recreational activities during a period of three consecutive years in order to assess the stability of such behavior and to relate it to the adolescents' occupational aspirations.

Review of the Literature

Support for the inclusion and development of extra curricular or student activities as an integral part of the American school system of secondary education has come from various sources. Three of the major movements which have contributed to their development are: (1) the philosophy of education promoted by John Dewey and his followers which stressed educating the "whole child" and emphasized the importance of experience in learning; (2) development of organismic psychology as well as psychologists' emphasis on the concept of developmental tasks; and (3) increased urbanization resulting in a growing number of families unable to keep large numbers of young people busy (Graham, 1964).

Frederick (1959) suggested that student activities contribute to further school objectives by reinforcing classroom learning, supplementing formal studies, aiding total life adjustment, integrating learning, and helping to democratize school and American life. Be so doing they help the student in (1) his search for identity; (2) adjusting to his physical growth; (3) mastering his social skills; (4) resolving conflicts and expressing values; (5) seeking independence; (6) keeping up educational enthusiasm; and (7) deciding on a life role.

Participation in School Activities

Smith (1945) reported a high degree of relationship between participation in extra curricular activities and socio-economic status as measured by Sims' scale. Hollingshead (1949) found that adolescents in the middle and lower-upper social class were more likely to attend athletic events, school dances, evening plays and parties, and other extra curricular activities than adolescents in lower classes. Abramson (1952) reported that middle-class pupils participated in more extra curricular activities, received more scholastic awards, held student offices, and participated more frequently in student government, proportionately, than pupils in lower classes.

Both Hollingsworth (1940) and Levinson (1961) suggested that adolescents of higher intellectual capacities participate in a larger number of recreational activities, and in a greater diversity of programs than adolescents of lower capacity. Bourgon (1967) analyzed the extra curricular activities of 740 students during their three years in high school and found that a greater number of students who were successful academically participated in more activities than those who were less successful academically.

Out of School Activities

The literature in the area of out of school activities as well as in the area of school activities has indicated that social class greatly influences the direction of adolescents' interests as well as their involvement in activities. In a study conducted for the Boy Scouts of America in 1960, cited by Goldstein (1967), it was found that certain activities appeared to be fairly equally available to all classes but that in several of these activities boys of higher social status showed a higher degree of participation. In regard to participation in voluntary organizations, lower-class adolescents, like lower-class adults, evidenced minimal participation as reported by Crichton (1962), Scott (1957), and Wright and Hyman (1958).

Occupational Aspirations

Most adolescents have often contemplated the type of occupation in which they would like to be engaged in adult life. Many researchers have tried to understand, classify, and quantify adolescents' occupational interests. The result has been the development of a number of scales and questionnaires; definitions of realistic and unrealistic job aspirations; and an ever growing fund of information compiled to assist students in making occupational choices.

Super (Super, 1951; Super et al, 1957) related realism in vocational choices to the accomplishment of one of the adolescent's most basic developmental tasks--that of self identity. He proposed that occupational choices were acts in the implementation of a self-concept. The person choosing an occupation believes that the roles he will play in that occupation will be consistent with his picture of the kind of person he is. Within the constraints permitted by economic limitations, choices are made where occupational roles and self concept are compatible.

Gist (1964) studied the aspirations of a mixed group of 873 Negro and white adolescents enrolled in 9th and 12th grade. He found that in general Negro students had higher occupational mobility aspirations than white subjects. He attributed part of the difference between the two groups to the Negro mother's exertion of a strong influence on her children for mobility aspirations. Gist's findings seem to be consistent with a general trend evidenced in several studies in Negro youth, in general, they appear to aspire, oftentimes unrealistically, to high level occupations. Herson (1965) reported a marked discrepancy between their aspirations and the employment patterns of t their families. She interpreted this discrepancy as evidence of a desire to escape from their present state. In Super's interpretation, this would mean failure to accept the self or perhaps using the ideal as the referent in setting aspirations.

Contrary to this general trend, Smith (1962) reported that among Negro high school students from middle or upper-social strata vocational choices were more realistic as indicated by definite preference for professional jobs. Contrary to this more priviledged group, and in accordance to the previous studies, he once again found lower-class Negroes more indefinite, in their aspirations, wishing for "good jobs."

Middleton and Grigg (1959) studied rural-urban differences in aspirations among a sample of approximately 20% of Florida high school seniors during 1954-55. They found differential aspirations among their white males, those from urban areas indicating higher educational aspirations than those from rural areas. Among their Negro subjects, however, they failed to find any significant rural-urban differences in aspiration. They interpreted this discrepancy by pointing out that the Negroes who remain in high school through the 12th grade are a very select group, and it may be that it is precisely this group among Negroes who have uniformly high occupational and educational aspirations regardless of area of residence.

A more recent study by Burchinal (1961) reported lower levels of educational and occupational aspirations among farm boys and consistently higher aspiration levels among metropolitan city boys at both 10th and 12th grades. He observed further that planning to farm had a depressing effect of aspiration levels; and that the aspiration levels of nonfarm oriented farm-reared boys approximated th of the rural nonfarm and small town boys.

Description of Subjects

The participants in this study consisted of 301 adolescent males. Of these 166 were enrolled in eighth grade in the fall of 1965. The remaining 135 adolescents were enrolled in tenth grade the same year. All of them participated for three consecutive years in the larger study from which the present sample were drawn. Therefore, the data collected for the first 166 participants covered the period of their enrollment in eighth, ninth, and tenth grade. For the 135 adolescents that form Group 2, it covered the period they were enrolled in tenth, eleventh, and twelfth grades.

In 1965 these adolescents ranged in age from 13 to 19 with a mean age of approximately 15.3 years. Separate examination of the two subsamples within the study indicated that, as expected, the subjects in Group I (N166) were younger than those in Group 2 (N135). They ranged in age from 13 to 17 with 51.4 per cent of them being 15 years old. In Group 2, ages ranged from 15 to 19, with slightly over one-half being 16 954.7 per cent), and only 2 students being 19 years old.

All of the participants belonged to the lower social class according to the McGuire-White Index of Social Class. The lower-lower class category was comprised of 52.2 per cent of the 301 adolescents within that social class; 10.6 per cent belonged to the upper-lower category. When the two groups were examined independently a similar distribution remained, with the former of these two subsamples having a larger concentration of adolescents in the lower-lower category (60.3 per cent) than the total sample.

Negroes accounted for 51.2 per cent of the sample. This distribution was representative of the larger study. In examining the subsamples it was found that a similar distribution was not prevalent in Group 2. In that group there was a slight predominance of white adolescents with only 43.7 per cent of the 135 boys being Negro.

Most of the adolescents in the study came from large families. Almost half of them, 43.2 per cent, had over 5 siblings, including half-brothers and sisters. Considering the fact that they came from working-class families, the large size of their families was not unusual. Most of the fathers, 48.2 per cent, were engaged in semi-skilled or heavy labor; 24.7 per cent of the mothers were employed as maids and in other kinds of heavy labor. The large size of the families may in part account for the fact that half of the mothers, 51.5 per cent were unemployed or reported as being housewives.

The great majority of the parents had a limited formal education. None of the fathers was a college graduate. Only 33.6 per cent of them had remained in school after completing eighth grade. The mothers had had more education than the fathers. Among them 24.2 per cent had completed high school as compared to only 12.0 per cent of the fathers. It was noticed that a large number of the boys, 30.2 per cent, did not know how much education their fathers had. This was not true in relation to the mothers, boys appeared to be closer to them and to know more about them. To some extent this may be explained by physical separation as well as by poor patterns of communication that prevail in many of the families in this social strata.

Contrary to the limited education of both parents, their aspirations for the subjects' education, as perceived by the sons, was extremely high. More than one-fourth of the sample, 29.6 per cent, reported that they believed their parents would like them to attend graduate school. One-fifth, 20.4 per cent, stated their parents wanted them to have as much education as possible. Only one adolescent out of the 301 in the group stated that his parents' educational aspiration for him was eighth grade. This high level of educational aspiration appeared to be unrealistic when the group's IQ's were examined.

It was found that of the 301 participants, four had IQ's above 130, the highest among these being 133. Among the remaining 297 boys the IQ distribution was not normal with a heavier concentration in the lower range. Almost half of them, 46.9 per cent, had IQ's below 90. Only 39.9 per cent had IQ's between 90-109. It must be pointed out that the boys in Group 2 had a larger proportion of higher IQ's than those in Group 1. In Group 2, 20.8 per cent had IQ's above 110 while in Group 1 only 14.4 per cent did so. Part of the extremes in the lower range was explained by the fact that IQ's for the participants were obtained from two different sources. The IQ's that were originally used in the selection of the sample were secured from existing school records. These had been obtained using different intelligence tests. In order to obtain greater consistency a trained examiner from the project tested the participants during the 1966-67 academic year. The scores obtained by the trained examiner were in several cases lower than those reported by the school records. It was found that subjects who prior to 1966 had tested above 70, when tested by the project examiner with the California Test of Mental Maturity, scored as low as 50 IQ points. It was not known whether this discrepancy in IQ was due to the progressive decrease in intelligence that has been associated with the continuing low levels of stimulation found in intellectually deprived environments, or whether it was due to differences in the testing situation.

Test of Hypotheses and Discussion of Results

Four hypotheses were examined in this study. They dealt with developmental changes among adolescents in relation to two main variables: (1) participation in recreational activities, and (2) occupational aspirations.

It will be noticed that the size of N in the tables accompanying the discussion is not constant. This inconsistency is explained by the failure of several subjects to respond to all the items included in the instruments administered.

> Hypothesis I: There will be no significant difference in the extent to which lower-class male adolescents participate in recreational activities during three consecutive academic years.

Examination of Hypothesis I produced evidence that lead to the rejection of this hypothesis ($\underline{p} < .05$ to $\underline{p} < .001$). It was found that in agreement with the current literature, the participants of the present study were characterized by a low level of participation in educational and recreational activities.

During the first year of the study 22.6 per cent of the adolescents in Group 1 did not participate in any of the 23 activities listed in the instrument they were administered. Of the remaining 127 adolescents 50 per cent reported participation in one to three different activities and 27.4 per cent indicated that during a regular month they participated in 4 or more activities. For Group 2 the level of participation was higher with 12.7 per cent reporting no participation and 87.3 indicating participation in one or more activities. The level of participation reported by adolescents in Group 2 remained higher than that of adolescents in Group 1 during the third year as evidenced by the percentage of adolescents who were nonparticipants that year, 15.2 per cent in Group 1, and 13.4 per cent in Group 2.

Examination of the data indicated that in agreement with the findings of Goldstein (1967) the most popular activities in both groups were activities of a physical nature, more specifically football and basketball. Activities of an educational or cultural nature were not among the five most popular activities for either group.

Although the proportion of participants in Group 2 remained higher than that in Group 1, significant developmental changes of different nature occurred in each group during the three years. The chi-square values for the significance of the changes evidenced in each group are presented in Table 2.

A significant increase ($\underline{p} < .01$ to $\underline{p} < .001$) in participation was evidenced in Group 1. The per cent of nonparticipants among the 164 adolescents who responded decreased from 22.6 per cent in year 1 to 15.2 per cent in year 3. Also noticed was an increase from 27.4 per cent in year 1 to 31.7 per cent in year 3 of adolescents in this group who reported participation in four or more activities.

The increase in participation evidenced in Group 1 could perhaps be interpreted on the basis of the widening interests that result from the changes in the personality structure of adolescents. At this stage of development better physical coordination, greater physical strength and an increasing ability to relate to others enable adolescents to expand the scope of their activities.

Contrary to the adolescents in Group 1, those in Group 2 evidenced a significant ($\underline{p} < .05$ to $\underline{p} < .001$) decrease in participation. It could be that as they move away from adolescence and approach young adulthood, new responsibilities and different activities occupy their interests. Regular part-time employment, academic responsibilities and social activities are very likely to place demands on their time. They limit participation in the educational and recreational activities that were more popular earlier. It could also be that as lower-class individuals become older, the apathy that has been associated with their attitude toward organized activity is strengthened.

TABLE 2

SIGNIFICANCE OF CHANGES IN ADOLESCENTS' PARTICIPATION IN ACTIVITIES DURING THREE CONSECUTIVE YEARS

Year	N	Chi-Square	df	Level of Significance
		Group 1		
1 and 2	164	18.281	4	.01
2 and 3	162	36.431	4	.001
1 and 3	164	14.886	4	.01
		Group 2		
1 and 2	130	21.021	4	.001
2 and 3	110	11.047	4	.05
1 and 3	110	20.093	4	.001

The nature of the changes in the pattern of participation during the three years is presented in Table 3 for each group.

> Hypothesis II: There will be no significant differences in the extent to which lower-class male adolescents participate in recreational activities during three consecutive years when the following variables are controlled: (a) race, (b) IQ, (c) father's education, (d) mother's education, (e) father's occupation, and (f) mother's employment.

Hypothesis II was rejected. Significant developmental differences ($\underline{p} < .05$ to $\underline{p} < .001$) in the subjects' participation in educational and recreational activities remained when control was introduced through six intervening variables.

In Group 1 the relationship between developmental changes in participation and four of the six intervening variables was significant for all of the two-year comparisons. Both IQ and father's education were significantly related to changes in participation from year 2 to year 3, and year 1 to year 3, but not for the changes that occurred from year 1 to year 2.

TABLE 3

CHANGES IN ADOLESCENTS' PARTICIPATION IN ACTIVITIES DURING THREE CONSECUTIVE ACADEMIC YEARS

Year	Total N	Nature of Changes					
		No Change		Higher P.A.*		Lower P.A.	
		N	%	N	%	N	%
Group 1							
Year 1 Vs Year 2	164	87	53.0	45	19.5	32	17.5
Year 2 Vs Year 3	162	97	59.8	35	21.6	30	18.4
Year 1 Vs Year 3	164	81	49.3	33	20.1	50	30.6
Group 2							
Year 1 Vs Year 2	134	89	66.4	22	16.4	23	17.2
Year 2 Vs Year 3	135	80	59.2	19	14.1	36	26.7
Year 1 Vs Year 3	134	76	56.7	23	17.2	35	26.1

*Participation in Activities

It was noticed that when race, father's education, mother's education, father's occupation, and mother's occupation were controlled, the direction of developmental changes observed remained similar to the one reported for the total group. There was a decrease in the number of nonparticipants and an increase in the number of participants, particularly among those who reported participation in one to three different activities.

Such was not the case when IQ and father's occupation were controlled. Contrary to the findings of Levinson (1961), there was a significant decrease ($p < .001$) in participation from year 2 to year 3 among adolescents with IQ's above 100. The same situation occurred among adolescents whose IQ ranged from 80-99 when changes from year 2 to year 3, and from year 1 to year 3 were examined. Since year 3 was the first year of high school for adolescents in Group 1, it may well be that new academic demands occupied more of their time. Added to this may have been the problem of social adjustment. It must also be remembered that no examination of the facilities provided by the schools was obtained. Therefore, it cannot be ascertained if the decrease in participation was related to more limited opportunities provided in a new school.

A significant decrease in participation from year 2 to year 3 was also evidenced among the adolescents whose father's were skilled laborers. Among those whose fathers were engaged in non-skilled occupations a decrease in participation was observed from year 1 to year 3.

In group 2 the relationship between developmental changes in participation and each of the six intervening variables was significant for all of the two-year comparisons. When the relationships were examined in order to ascertain the direction of the changes that occurred during the three years, it was found that, in all instances, the change was in terms of decreased participation. Nevertheless, the way in which this was expressed varied.

For Negroes, there was no change in the number of nonparticipants. Instead there was a significant decrease in the number of Negroes who participated in four or more activities throughout the three years. White youth evidenced decreased participation in four or more activities and an increase in the number of nonparticipants.

When IQ was controlled, it was found that among those with very low IQ's, there was no change in the number of nonparticipants and a decrease in those who participated in four or more activities. Those with higher IQ's participated less in four or more activities and ceased to participate in activities in increasing numbers through the three years.

When father's education was controlled, there was a consistent increase in nonparticipants and a decrease in those who participated in four or more activities for all except for those adolescents whose father's education was not known to them. In that category there was an increase in nonparticipants from year 1 to year 2, no change in participants in one to three activities and a decrease in participants in four or more activities. From year 2 to year 3 there was no change in any of the three participation categories.

Among the participants whose mothers had completed 9th grade or more there was no change in the number of nonparticipants. The decrease, for them, occurred in those who participated in four or more activities.

Father's occupation also influenced participation in activities except in the case of those adolescnets whose fathers were unemployed or who did not know what their father's occupation was. In all instances that significant relationships were obtained by controlling for this variable, the direction was one of increase in the number of non-participants. The same direction of change prevailed when maternal employment was controlled. The relationships examined suggested an interaction between participation in activities and each of the six variables that were controlled. Further exploration in this respect is needed in order to gain a clearer understanding of the observed interaction.

Hypothesis III: There will be no significant difference in the occupational aspirations of lower-class male adolescents during three consecutive academic years.

Hypothesis III was rejected. There were significant ($p < .05$ to $p < .001$) differences for both Group 1 and Group 2 in relation to their occupational aspirations from year 1 to year 2, year 2 to year 3, and between year 1 and year 3. The chi-square values for the significance of differences frr Group 1 and Group 2 are presented in Table 5.

TABLE 5

SIGNIFICANCE OF DIFFERENCES IN ADOLESCENTS' OCCUPATIONAL ASPIRATIONS

Year	N	Chi-Square	Level of Significance	df
Group 1				
Year 1 and Year 2	155	12.964	.02	4
Year 2 and Year 3	146	19.749	.001	4
Year 1 and Year 3	144	20.094	.001	4
Group 2				
Year 1 and Year 2	130	21.021	.001	4
Year 2 and Year 3	110	25.831	.001	4
Year 1 and Year 3	110	11.047	.05	4

Each participant was aked to indicate three jobs he would like to do in life. These were ranked using the McGuire-White Index of

Social Status. Responses classifiable under the first two categories of the Index were considered to represent high occupational aspirations: professionals with post baccalauraete study, top executives, and professionals with four-year college degrees. Responses that fell below the skilled-labor classification were considered to represent low occupational aspirations. Using that classification, it was found that 40.6 per cent of the participants in Group 1 and 48.5 per cent of those in Group 2 had high occupational aspirations during year 1. Only 30.3 per cent and 22.3 per cent of the adolescents in Group 1 and 2 respectively expressed interest in skilled occupations the first year of the study. These figures point to a very high level of occupational aspiration which, when considered in terms of the capacities of the groups, appeared unrealistic. It must be remembered that both groups had a large proportion of adolescents with low IQ's. According to Crow and Crow (1965) such unrealistic aspiration is not uncommon by middle-class adolescence.

The unrealistic aspirations gave way to more realistic aspirations as the adolescents grew older, a trend supported by the findings of Ginzberg (1951) who considers vocational choice a developmental process rather than an event.

When the occupational aspirations in year 1 were compared to those in year 2 and year 3, a noticeable trend towards more realistic aspirations was evidenced. With each succeeding year the number of students with very high aspirations diminished, and the number of those who aspired white collar or skilled labor occupations increased. This trend is supported by the work or Ginzberg (1951) and may therefore be indicative of the adolescents' increasing realism.

The frequency with which participants changed their occupational aspirations during the three years was higher among the adolescents in Group 2. Participants in Group 2 were older than those in Group 1, many of them approaching young adulthood. It could be that the marked frequency of change was the result of growing self-understanding. Super (1951) suggested that realism in vocational choice reflects developmental changes in self-identity. This explanation is tenable for the adolescents in the present study. It is suggested that with succeeding solutions of identity crises, adolescents attained better understanding of themselves and were able to see occupational choices through different perspective. Thus, the aspirational change to occupations was more easity attainable.

Hypothesis IV: There will be no significant relationship between the participation in leisure time activities of lower-class male adolescents and their occupational aspirations.

TABLE 7

INDIVIDUALS CHANGES IN OCCUPATIONAL ASPIRATIONS

		Nature of Changes					
Year	N	No Change		Higher O. A.		Lower O. A.	
		N	%	N	%	N	%
		Group 1					
Year 1 and Year 2	155	71	45.8	38	24.5	46	29.7
Year 2 and Year 3	146	69	47.1	34	23.2	43	29.5
Year 1 and Year 3	144	67	46.5	37	25.8	40	27.7
		Group 2					
Year 1 and Year 2	130	65	50	28	21.6	37	28.4
Year 2 and Year 3	110	57	51.9	18	16.3	35	31.8
Year 1 and Year 3	110	46	41.9	26	23.5	38	34.6

Hypothesis IV was rejected for one (year 3) of the three comparisons between participation in activities and occupational aspirations ($p< .01$) made for Group 1 and for one of the comparisons (year 2) made for Group 2 ($p< .01$). The other chi-square values obtained, although high, were not statistically significant.

A close examination of Group 1 revealed that of the 147 adolescents who responded, 13.6 per cent did not participate in any activity during year 3, 33.3 per cent reported participation in four or more activities. Of the 20 nonparticipants, only 15 per cent had very high aspirations and 55 per cent had very low aspirations. The opposite was the case among the group of 49 adolescents with the high participation scores. The occupational aspirations of 46.9 per cent of them were very high and only 10.3 per cent reported low aspirations.

Analysis of Group 1 on the basis of aspirations revealed that 29.9 per cent of the 147 participants had high occupational aspirations during year 3. Among these only 6.8 per cent reported no participation.

In Group 2 only 7.8 per cent of the participants who reported high occupational aspirations during year 2 did not participate in activities. Among those with low occupational aspirations, the percentage of nonparticipants was higher. In Group 2 as in Group 1, the level of aspirations remained higher among adolescents who participated in acticities than among those who did not participate. One important factor to be considered is that the nature and frequency of participation in activities was not controlled in the present study. Had such control been made, it is likely that the direction of the relationship established between the two variables would have remained and perhaps, could have been stronger.

Summary

Significant changes in relation to the extent to which students participated in activities remained when race, IQ, father's education, mother's education, father's occupation, and mother's employment were controlled. The relationship between participation in activities and occupational aspirations was significant only for one of the three two-year comparisons.made for each of the two groups studied.

More specifically, these significant changes indicated that in Group 1 there was a significant ($\underline{p}<.01$) increase in the number of adolescents who became active in recreational and educational activities from year 1 to year 2; from year 2 to year 3 the significant change ($\underline{p}<.001$) was in the opposite direction--participation decreased; and between year 1 and year 3 a significant ($\underline{p}<.01$) increase in participation was noticed. For Group 2 the significant changes evidenced were of a different nature. From year 1 to year 2 a significant ($\underline{p}<.001$) decrease in participation in activities took place. From year 2 to year 3 there was a significant ($\underline{p}<.001$) increase in participation. Examination of the changes from year 1 to year 3 indicated that once again a decrease was evidenced ($\underline{p}<.01$).

Group 1 adolescents evidenced significant ($\underline{p}<.02$ to $\underline{p}<.001$) decrease in the aspirations from year 1 to year 2; year 2 to year 3 and year 1 to year 3. For Group 2 the aspirations of the adolescents were significantly lower ($\underline{p}<.001$) in year 2 than they were during year 1. From year 2 to year 3 there was a significant ($\underline{p}<.001$ decrease in very high and very low aspirations and an increase in adolescents who aspired to occupations in white collar jobs or skilled labor. Comparisons between year 1 and 3 evidenced a significant ($\underline{p}<.05$) change in the same direction as that between years 2 and 3.

When the relationship between participation in activities and occupational aspirations was examined, it was found to be significant ($\underline{p}<.01$) for both groups. In Group 1 the significance was established during the year 3, in Group 2 during year 2. In both cases high aspiration was significantly related to high level of participation.

REFERENCES

Abramson, A. Our status system and scholastic rewards. Journal Educational Sociology, 1952, 25, 441-450.

Behring, W. Activities and academic achievement. Personnel Guidance Journal, 1966, 44, 734-737.

Bell, J. W. School dropouts and school activities. School Activities, 1964, 36, 4-7.

Blalock, H. M. Social Statistics. New York: McGraw Hill Book Co., Inc., 1960.

Bourgon, J. K. Which students are active? School Activities, 1967, 38, 15.

Burchinal, L. G. Differences in educational and occupational aspirations of farm, small-town, and city boys. Rural Sociology, 1961, 26, 107-121.

Cameron, Mary. An inquiry into the factors governing membership in youth clubs and juvenile organizations. British Journal Educational Psychology, 1948, 18, 48.

Cannon, K. L. The relationship of social acceptance to socio-economic status and residence among high school students. Rural Sociology, 1957, 22, 142-148.

Chricton, A., James, E., & Wakeford, J. Youth and leisure in Cardiff, 1960. Sociological Review, 1962, 10, 203-220.

Clarke, A. C. The use of leisure and its relation to levels of occupational prestige. American Sociological Review, 1956, 21, 301-307.

Clift, V. A. Recreational and leisure-time problems and needs of Negro children and youth. Journal Negro Education, 1950, 19, 333-340.

Crow, L. D., & Crow, Alice. Adolescent development and adjustment, 2d. ed. New York: McGraw-Hill, 1965.

Empey, L. T. Social class and occupational aspirations: A comparison of absolute and relative measurement. American Sociological Review, 1956, 21, 703-709.

Frederick, R. W. The third curriculum. New York: Appleton-Century-Crofts, Inc., 1959.

Garfield, S., & Roeber, E. A study of occupational interest of high school students in terms of grade placement. *Journal Educational Psychology*, 1943, *34*, 355-362.

Ginzberg, E., Ginzberg, S. W., Axelrod, S., & Herme, J. L. *Occupational Choice*. New York: Columbia University Press, 1 1951.

Gist, Noel, & Bennett, W. S. Aspirations of Negro and white students. *Social Forces*, 1964, *42*, 40-48.

Goldstein, Bernard. *Low income youth in urban areas*. New York: Holt, Rinehart, and Winston, Inc., 1967.

Graham, Grace. Student Activities: An overview and a rationale. *Bulletin National Association Secondary School Principals*. 1964, *48*, 1-16.

Guildford. *Fundamental statistics in psychology and education*. New York: McGraw-Hill Book Co., Inc., 1950.

Herriott, R. E. Some social determinants of educational aspirations. *Harvard Educational Review*, 1963, *33*, 157-177.

Herson, Phyllis. Personal and sociological variables associated with the occupational choices of Negro youth. *Journal Negro Education*, 1965, *34*, 147-151.

Holland, J. L., & Nichols, R. C. Prediction of academic and extra-curricular achievement in college. *Journal Educational Psychology*, 1964, *55*, 55-65.

Hollingshead, L. S. *Elmstown's youth*. New York: Wiley, 1949.

Hollingsworth, L. S. Personality and adjustment correlates of intelligence. *39th Year National Sociological Educational*, 1940, 271-275.

Hurlock, Elizabeth. *Adolescent development*. New York: McGraw-Hill, 1967.

Kahl, J. A. Educational and occupational aspirations of "common man" boys. *Harvard Educational Review*, 1953, *23*, 186-203.

Kennedy, W. A., Vernon, V., & White, J. C. A normative sample of intelligence and achievement of Negro elementary school children in the southeastern United States. *Monograph of the Society for Research in Child Development*, 1963, 28, No. 6, (Serial No. 90).

Krippner, S. Mass media influence and the vocational preferences of junior high school pupils. *Elementary English*, 1963, 35, 24-29.

TEACHERS' PERCEPTIONS OF MALE YOUTH FROM LOWER-CLASS FAMILIES

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One of the major problems facing the nation is how to provide education for the large number of children who are educationally, socially, and emotionally handicapped by the economically impoverished environments in which they live. These lower-class children have been called "the culturally handicapped," "the underprivileged," "children of poverty," "the culturally deprived," and "the culturally disadvantaged."

National Perspective

It has been estimated that by 1970 one out of two children in the United States may be educationally disadvantaged (Shaw, 1963; Stuart, 1962). Riessman (1962) reported that in 1950 approximately one out of every ten children in the fourteen largest cities in the United States was culturally deprived with a particular set of educationally associated problems arising from and residing extensively within the culture of the poor. By 1960, this figure had risen to one inthree. He estimated that by 1970, there may be one deprived child for every two children enrolled in schools in these fourteen large cities.

The problem is not, however, confined to the urban areas; there were, according to Burchinal (1964), some 13.2 million rural families in the United States in 1962, of which some 4.2 million, or 22 per cent, had total annual money incomes below $3,000. Of the 16 million rural persons in these economically poor families, three-fourths (11.25 million were white, and over half of these lived in the South; of the one-fourth who were non-white (3.25 million), the majority were Southern rural, nonfarm Negroes.

The Lower-Class Student

Students who come from the lower-class socio-economic background, rural, urban, or suburban, have characteristics which educators must recognize and accept. From the proponderence of literature it may be hypothesized that the disadvantaged student in school can be described as one who usually has several of the following characteristics:

He has an inadequate self-image.
He is one or more years behind his age group in school.
He is frequently tardy, absent, or truant.
He is unable to communicate adequately either in writing or in speaking to achieve school success.

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He is retarded in reading.
He has a lack of knowledge of or feeling for school routine.
He generally performs poorly on tests.
He appears to be a slow learner or is an underachiever.
He is hostile to authority.
He is apathetic or indifferent toward school.
He fails to do homework assignments regularly.
He has an anti-intellectual attitude.
He has limited or unrealistic aspirations and long-term goals.
He does not generally participate in extra-curricular activities.
His parents often appear disinterested in school and do not come to school-related functions unless sent for.

Research illuminates clearly the need for a more complete understanding of the lower-class student. Frost and Hawkes (1966) state that teachers and administrators do not know nearly enough about coordinating methods, materials, and the developmental levels of disadvantaged children, concluding that even less is known concerning the teachers' role in the intervention of deprivation.

Riessman (1962) maintains that the neglect of students from lower-class backgrounds has been typical of almost all schools, both urban and rural. He believes that pupils from culturally deprived homes are commonly resented by teachers as drawbacks to the morale and achievement of the school class. Lower-class students see little value in formal academic routines and have often been humiliated by failure which results in hostility toward school personnel. As the vicious circle deepens, the alienation between teachers and pupils who most need their help, increases.

The Family of the Lower-Class Student

Compared with children whose families are not considered culturally deprived, the family of the culturally deprived child lacks several of the following:

> A family conversation which answers his questions and encourages him to ask questions; extends his vocabulary with words and with adjectives and adverbs; and gives him a right and a need to stand up for and to explain his point of view. . .
>
> Two parents who read a good deal; read to him; snow him that they believe in the value of education; and reward him for good school achievement. (Havighurst, 1964, p. 213).

Recent research indicates that children of low socio-economic status are often found in one-parent families. This is especially true of the Negro family (Bernard, 1966). The absence of one parent which, in almost all cases is the father, may make the adjustment more difficult for the boy than for the girl.

Almost all parents of low socio-economic status have little formal education (Chilman, 1964). In may instances this results in a lack of appreciation for education; consequently, children are not encouraged to remain in school any longer than required by law.

The problem of inadequate family income may affect the culturally deprived child in several ways. He may be forced to assume part of the family's financial support through a part-time or full-time job. He not only may suffer embarrassment in the presence of his peers because of inadequate food, inferior clothing, and unsightly housing, but also, he may blame his parents for these undesirable circumstances.

The low socio-economic status family is characterized not only be material and cultural deprivation, but also by certain untoward practices and standards of conduct; e.g., there is a high rate of illegitimacy (Bernard, 1966); mothers tend to be more severe in rearing their children, they give them less freedom and affection, and they use harsher means of punishment (Maccoby and Gibbs, 1954).

The family environment of the culturally deprived tends to produce children with personal limitations. Such children, Deutsch (1963) concludes, have inferior auditory discrimination, inferior visual discrimination, inferior judgement concerning time, number, and other basic concepts. This inferiority is not due to physical defects of eyes, ears, and brain but rather to inferior habits of hearing, seeing, and thinking.

Riessman presents a balance sheet summarizing the personal and familial characteristics of the culturally deprived child:

> On the liability side of the ledger are: narrowness of traditionalism, pragmatism, and anti-intellectualism; limited development of individualism, self-expression, and creativity; frustrations of alienation; political apathy; suggestibility and naivete; boring occupational tasks; broken, over-crowded homes.
>
> On the asset side of the ledger are: the cooperativeness and mutual aid that mark the extended family; avoidance of the strain accompanying competitiveness and individualism; equalitarianism, informality, and warm humor; freedom from self-blame and parental over-protection; the children's enjoyment of each other's company, and lessened sibling rivalry; the security found in the extended family and in a traditional outlook (Riessman, 1962, p. 48).

In conclusion, there is need of a more thorough understanding of the relationship between teachers and children from culturally deprived families. There is also need for greater understanding of the school--its curriculum content and organization; the quality of its interpersonal relations; and the values and perceptions of its professional personnel.

The School and the Lower-Class Student

Studies indicate that from 25 to 30 per cent of the youngsters in school between the ages of thirteen and sixteen have shown that they are not able to profit from present educational programs (Olsen, 1954). Frost and Hawkes (1966) maintain that many of the current educational practices reflect a greater concern for what is taught than for the process of learning. Similarly, they conclude that many schools are organized as though it would be better for the child to change his needs than for the school to modify its demands. This is evidenced by a strict adherence to grade-level standards without regard for individual differences, the assignment of instructional material without consideration for the child's level of development, a failure to recognize and provide for the basic needs of disadvantaged children, the use of instructional materials inconsistent with the child's ability, and an enforced estrangement between the school and the parents of the poor.

When the disadvantaged child encounters the public school--America's chief instrument for fostering equality of opportunity--it succeeds only in reinforcing the results of the discrimination that is built into his entire social environment. When this happens, disadvantaged children learn to think that they are, indeed, untalented, unliked, and unworthy.

A host of programs are under way which demonstrate that, with energy, creativity, hopefulness, and money, progress can be made. Almost all of these programs are still regarded as experimental. Many of them have been begun since 1945, and most since 1959. Educational Research Service, Circular No. 1, 1965, entitled "School Programs for the Disadvantaged," describes the efforts of some 44 school systems across the United States to cope with the growing problems of educating the disadvantaged child.

Many reasons account for the inability of schools to solve the problems of the disadvantaged child. The school has been asked to remedy a profound failure in American life with deep roots in American history yet, the public has rarely granted schools anything near the resources they need to do the vast job.

Keppel (1965), former U.S. Commissioner of Education, concludes that:

> . . . our efforts for the culturally disadvantaged will not demand simply the provision of equal educational resources. These children must have more than equal resources to make up for the cultural lag that has been imposed upon them. They need the most skilled teachers, the least crowded classrooms, and the best educational opportunity.

After studying the possible reasons for the success of some schools serving disadvantaged youngsters, Haberman (1964) concluded that the most important factors are the nature of leadership and the quality of teaching. The principals and teachers in these schools showed a commitment to what they were doing and were deeply involved in their work. The principals who were effective in disadvantaged neighborhoods seemed to have a willingness to participate in educational change, an ability to exert moral leadership, and the capacity to influence students and community.

The Teacher and the Lower-Class Student

Because of the attitudes of a great majority of teachers which are molded by their own middle-class backgrounds and values, they often do not understand or approve the behavior of children from lower-class backgrounds (Cohn, 1959). It has been suggested by Henry (1955) that teachers do not show favoritism toward their middle and upper-class pupils. Rather, they have more conflicts with their lower-class pupils because of a clash of values, this being especially true of lower-class boys whose background has encouraged them to be aggressive and whose parents put a low value on academic achievement.

Charters (1963) states that American teachers may be characterized as predominantly college-educated, native-born, Protestant, white, middle-aged, married females of middle-class origin. Since the teachers' judgments of the students' accomplishments is largely based upon their own personal standards, buttressed by those set up by the school as an institution, lower-class students are at a disadvantage when competing with middle-class students.

Groff (1964) using statements from Riessman's book, The Culturally Deprived Child, asked 373 elementary teachers to indicate their attitudes regarding the importance of teacher-student interaction in working with lower-class children. The teachers maintained that although there was no need to give up their middle-class character, they should have respect for and acceptance of the lower-class child's culture and not try to "middle class" him. They stated further that frequent discrimination against the lower-class child had many negative effects upon his concept of self, anxiety level, and poor academic performance. The teachers emphasized the importance of analyzing the reciprocal effects their perceptions and attitudes play in interacting with lower-class children.

Davidson and Lang (1960) reported that teachers are less favorably inclined toward deprived children even when their school achievements are good. Furthermore, it was observed that the underprivileged children accurately perceived the teachers' rejection of them. Thus, the teachers' negative image of the deprived child is reflected in a lowering of the child's self-perception or self-image as well as in his academic achievement and classroom behavior.

On the other hand, Gottlied and Ramsey (1964) in studying academic and career expectations of 400 male freshmen in three universities found in response to the question, "Who would you say played the most important role in helping you decide to attend college?" that the lower-class students named teachers and counselors more frequently than did the respondents from the middle-class groups. These findings seem rather surprising in view of the evidence from the classic works of Havighurst (1944), Warner (1944), and Hollingshead (1949) who report that middle-class schools do little to enhance the upward mobility of lower-class children. Although Gottlieb and Ramsey's sample was selective since they used lower-class students who had succeeded in gaining entrance to college, it points to the significant role that teachers and school personnel may play in influencing the behavior of the lower-class student.

Bush (1954) found in his study of teacher-pupil relationships that those teachers who knew most about their pupils and were sensitive to their needs and interests, had more influential and effective relationships with a greater number than did teachers whose paramount concern was knowledge of subject matter. His study also confirmed that teachers differ greatly in the amount of information they have about their pupils and in the effectiveness with which they use the information they have.

Grams, Hafner & Quast (1965) comparing ratings of teachers with children's self-reports of anxiety, found a lack of substantial agreement between teacher ratings of adjustment and the children's own anxiety scores. This finding is consistent with the finding of L'Abate (1960), and suggests that teachers' perceptions of classroom adjustment is independent of the way in which a child admits to the presence or absence of anxiety.

Thelen (1961) points out that despite great individual differences in teachers' perceptions of who is teachable, there are some pupils--from 10 to 25 per cent of the average school--whom no teacher includes among the teachable. A significant implication of the studies of teacher characteristics, teaching process, and teachable groups is the recognition that variations in pupil attainment in the classroom are related to variations in teacher performance and that a particular teacher affects different pupils differently. Most teachers, Goldberg (1964) states, vary in their influence and effectiveness depending upon the characteristics of the pupils they confront, the opportunity to fulfill their expectations for themselves and for their classes, the content of what they teach, and the extent to which the school provides them with what they perceive to be necessary facilities.

In summary, many educators, according to McQueen (1965), believe it is doubtful whether every teacher, even with special preparation

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and experience, should be a teacher of the disadvantaged. The BRIDGE (Building Resources of Instruction for Disadvantaged Groups in Education) project (1965), conducted at Queens College, New York, reports that to some extent the necessary and desirable characteristics of teachers for the culturally deprived are the necessary and desirable characteristics of any good teacher. However, the report suggests, the difficulties of working with these children can be coped with most successfully if certain traits are predominant. One is unusual physical stamina. Others are emotional maturity, self-understanding, a fairly firm set of values that will sustain the teacher in difficult situations, the ability to project interest and enthusiasm in a subject, considerable objectivity, an inclination to experiment, the ability to individualize classroom procedures, and to use the arts as stimulants to learning the academic subjects. And perhaps the heart of the matter, the report concludes, is still another characteristic, and one that is hard to acquire--a deep commitment or dedication to extending help to those who need it.

Hypotheses Examined

Fifteen hypotheses were examined in this study. The first four concerned the relationship between teachers' ratings of adolescent males and the (a) anxiety, (b) self-concept, (c) family adjustment, and (d) intelligence of youth from economically deprived families. Interest was focused primarily on the task of ascertaining which variables were related to teachers' ratings.

The remaining eleven hypotheses were concerned with determining whether teachers' ratings were independent of other personal and familial characteristics of the youth from culturally deprived families.

Procedure

Selected criteria were employed to insure that the subjects came from lower socio-economic families. The sample population was selected partly on the basis of county and school personnel knowledge of lower socio-economic areas within North Florida. A Background Information sheet was first administered to all boys in grades eight, nine, and ten of the participating schools. After analyzing the biographical data collected from the subjects, only those who scored 52 or higher, designating lower-class on the McGuire-White Index of Social Status, were retained in the project sample.

Of the approximately 1,200 subjects enrolled in 29 public schools in North Florida who were participating in the larger study, only those who had completed the following instruments were included in the present study: (a) Background Information Sheet, (b) Manifest Anxiety Scale, (c) Family Opinion Survey, (d) Index of Adjustment and Values, (e) California Test of Mental Maturity (IQ), and (f) Teacher Rating Scale. A sample of 648 subjects was utilized in examining the specific hypotheses under consideration.

Description of the Instruments

During the initial phases of the investigation, the Background Information Sheet and all selected questionnaire instruments were evaluated by the research staff with regard to purpose, clarity of interpretation, format, ease of response, order of administration, and potentially inflammatory items.

Background Information Sheet

A Background Information Sheet was designed to provide information such as the following: (a) age, (b) grade in school, (c) race, (d) number of siblings, (e) ordinal position in family, (f) marital status of parents, (g) family composition, (h) father's education, (i) mother's education, (j) main source of family income, (k) place of residence, (l) employment of mother, (m) father's occupation, (n) mother's occupation, (o) the amount of education the family wanted the subject to acquire.

Manifest Anxiety Scale

The Taylor Manifest Anxiety Scale (1952) was used for assessing the level of anxiety of the subjects. The version of the Manifest Anxiety Scale used in the present study consisted of 60 statements represneting experiences, ways of doing things, beliefs, or preferences that are true of some people but are not true of others. Suinn and Hill (1964) found high anxiety subjects may be characterized as being dissatisfied with themselves and others.

Schmalzried (1967) in a study utilizing data from the same longitudinal research project as the present investigation found in administration of the Taylor Manifest Anxiety Scale to 1,017 subjects, a low but significant relationship between anxiety and educational plans of culturally deprived adolescent males. These data suggest that there is some relationship between the anxiety scale scores and behavioral patterns.

Family Opinion Survey

The Elias Family Opinion Survey, called also the Family Adjustment Test (FAT), was employed to measure the family adjustment of the subjects in this study.

The FAT yields a total score defined as an index of homeyness or homelessness. Instructions on the test instruct the subjects to respond to the 114 statements on the basis of their opinion about general family life, and not necessarily with reference to their own family. The underlying assumption of the test is that the responses are an expression of feelings directly related to the current adjustment of the subject and his family.

Index of Adjustment and Values

The Junior High School Form of the Index of Adjustment and Values, developed by Bills, Vance, and McLean (Bills, Manual of Instructions, n. d.) was used as a measure of self concept in this investigation. The instrument was designed to measure dimensions of self-acceptance, self-satisfaction, and other-acceptance. The subject looks at himself as he is, how he feels about the way he is, and what he would like to be like in terms of 35 traits.

California Test of Mental Maturity

The 1963 revision of the California Test of Mental Maturity--Short Form (CTMM) was used to obtain an indication of the subjects' IQ (Clark and Tiegs, 1963). The seven scores comprising the complete intelligence test were (1) logical reasoning, (2) numerical reasoning, (3) verbal concepts, (4) memory, (5) language, (6) nonlanguage, and (7) total score. The standardization of the CTMM was established on a national sample of 65,000 cases (Clark and Tiegs, 1963). Because of its emphasis on nonverbal material, it is considered to be applicable with subjects of low socio-economic status (Kennedy, Van de Riet, and White, 1963).

Teacher Rating Scale

The instrument used to measure teachers' perceptions of the subjects' behavioral characteristics was a revision of the Borgatta and Fanshel Teacher Rating Scale (1953). The original scale was derived from an analysis of the ratings made by social workers, psychologists, psychiatrists, teachers, and nonprofessional child-care workers of 316 children. Fanshel, Hylton, and Borgatta (1963) report that the behavioral areas were found to possess some degree of independence. These areas were: (a) Physical Aggression, (b) Sexual Activity, (c) Intellectual, (d) Compulsive Cleanliness, (e) Lethargy (unmotivated), (f) Self-destructiveness, (g) Unsociability, (h) Stealing and Lying, and (i) Anxiety. Reliability among raters was established by Borgatta and Fanshel (1965) yielding correlation coefficients of .75, .72, .77, and .60 on four subsample scores.

With permission of the authors, the 114 items on the original instrument were examined by the research staff and 84 were selected to make up the instrument for the present study. These items were selected primarily because they were considered to be more applicable to the school situation and the age group under investigation. An item analysis and a factor analysis were employed to evaluate the items on the present revision of the Teacher Rating Scale.

Administration of the Instruments

During the 1965-66 school year, graduate research assistants assigned to the larger project administered eight instruments, two at a time, to all the subjects. At least four appointments of one hour duration were made throughout the year with each school. Each subject was assigned an identification number which was placed on his questionnaire prior to each administration. Extreme care was exercised in every phase of the data accumulation to assure respondents that the data would be considered confidential.

In the spring of 1966 the Teacher Rating Scale was completed by a teacher or counselor who was familiar with the subjects' behavioral characteristics. The 1963 revision of the California Test of Mental Maturity--Short Form was administered to all subjects during the second year (1966-67) to obtain a measure of their intelligence.

Results

From the 1,200 subjects comprising the larger project sample, a sample of 648 subjects was utilized for the present analysis. All subjects were from the lower socio-economic class. Ages ranged from 13 to 17, with a mean age of 15. Negroes accounted for 49 per cent of the sample. Fifty per cent of the subjects came from families of 5 to 11 children. Seventy-one per cent of the parents of the subjects were living together. Sixty-three per cent of the fathers and 64 per cent of the mothers had less than a high school education. Sixty-three per cent were employed outside the home. Fifty-one per cent of the parents wanted the subjects to have as much as four years of college education.

Fifteen hypotheses were examined in this study. The first four were concerned with the relationship between teachers' ratings of adolescent males and (a) anxiety, (b) self-concept, (c) family adjustment, (d) intelligence of youth from culturally deprived families. The Pearson Product-Moment Correlation Coefficient was employed to determine the relationship between teacher rating scores and on the Manifest Anxiety Scale, Index of Adjustment and Values, Family Opinion Survey, and California Test of Mental Maturity. An analysis of variance was utilized to test for the significance of the correlation value obtained.

Eleven hypotheses dealt with the independence of teachers' perceptions of adolescent males' personal and familial characteristics. The chi-square test was used to examine the differences between Least Favorable and Most Favorable teacher perceptions and personal and familial characteristics of the subjects.

A factor analysis was utilized to examine the intercorrelations among items included in the Teacher Rating Scale, and to determine the presence of underlying factors which were related to various clusters of items. Eight factors underly the eight clusters of items on the Teacher Rating Scale. These were arbitrarily defined as: (a) learning, (b) defiance, (c) socialization, (d) likability, (e) anxiety, (f) temperment, (g) affection, and (h) assertiveness. From the factor analysis and subsequent identification of the underlying factors, subscales construction is suggested in future research with the Teacher Rating Scale.

The chi-square test was used in an item analysis which sought to determine those items which significantly differentiated those subjects scoring in the upper and lower quartiles on the Teacher Rating Scale. Seventy-six of the 84 items included in the Teacher Rating Scale were significantly discriminating at the .001 level, two at the .01 level, and one at the .05 levels respectively, and five were not significant. A split-half reliability coefficient, computed with the Spearman-Brown Formula of .97 was an indication of the reliability of the items in the Teacher Rating Scale.

From the analysis of the data, the following results were obtained:

1. Teachers' ratings of the male youth appeared to be significantly related to (a) anxiety, and (b) self-concept of the youth from economically deprived families. Subjects whose anxiety level was low tended, as a group, to evoke more favorable teacher ratings. The same held true when the relationship between teachers' ratings and self-concept was assessed.

2. No significant relationship existed between teachers' ratings of the youth and the family adjustment of the youth.

3. There was a significant relationship between teachers' ratings and intelligence of the youth from economically deprived families. The subjects with lower IQ's elicited less favorable teacher ratings.

4. There appeared to be no significant difference between least and most favorable teacher ratings and the following personal and familial characteristics of the youth from economically deprived families: (a) age, (b) grade, (c) parental aspirations for subject's education, (d) marital status of parents, (e) location of family residence, (f) education of father, (g) education of mother, (h) occupation of father, and (i) employment of mother. These findings would tend to indicate that teachers' perceptions of the subjects were not greatly influenced by the background characteristics of the youth.

5. A significant relationship existed between least and most favorable teacher ratings and race of the adolescent males in the present study. White subjects as a group, received less favorable teacher ratings than the Negroes.

6. Teachers differed in their perceptions of subjects from the upper-lower and lower-lower socio-economic class. The subjects from the upper-lower class received less favorable teacher ratings.

Implications

The evidence of the present study generally supports the view that teachers' ratings which reflect their feelings concerning youth are related to several personal characteristics of male youth from economically deprived families. This support, however, is accepted with caution, particularly in view of the low correlations obtained. However, it was concluded that teachers' ratings of the males who participated in the study are largely independent of familial background characteristics.

It was evident from the findings of the study that youth who come from lower socio-economic backgrounds have distinctive personal characteristics which educators should come to recognize and understand. It is believed that teachers and administrators who acquire this knowledge and understanding will become more effective in coordinating methods, materials, and personnel for those children who are in most need of their support. The evidence now available from the host of programs which are under way illustrates clearly that with energy, creativity, hopefulness, and money, progress can be made.

REFERENCES

Bernard, Jessie. Marriage and family among Negroes. New Jersey: Prentice-Hall, 1966.

Bills, R. E., Vance, E. L., & McLean, O. S. Index of adjustment and values. Journal of Consulting Psychology, 1951, 20, 384-390.

Burchinal, L. G., & Siff, Hilda. Rural poverty. Journal of Marriage and the FAmily, 1964, 26, 399-405.

Borgatta, E. F., & Fanshel, D. Behavioral characteristics of children known to psychiatric outpatient clinics. Child Welfare League of America, New York: March, 1965.

Bush, R. N. The teacher-pupil relationship. Englewood Cliffs, New Jersey: Prentice-Hall, 1954.

Charters, W. W., Jr. The social background of teaching. Chapter 14. In N. L. Gage (Ed.), Handbook of research on teaching. Chicago: Rand-McNally and Company, 1963, pp. 721-812.

Chilman, Catherine S. The crisis and challenge of low-income families in the 1960's. Journal of Marriage and the Family, 1964, 26, 39-43.

Clark, W. W., & Tiegs, E. W. California test of mental maturity--short form. 1963 revision, level 4. Published by California Test Bureau, Del Monte Research Park, Montery, California, 1961.

Cohn, W. On the language of lower-class children. School Review, 1959, 67, 435-440.

Davidson, Helen H., & Lang, G. Children's perceptions of their teachers feelings toward them as related to self-perception, school achievement and behavior. Journal of Experimental Education, 1960, 60, 107-118.

Fanshel, D., Hylton, Lydia, & Borgatta, E. F. A study of behavior disorders of children in residential treatment centers. Journal of Psychological Studies, 1963, 24, 1-23.

Frost, J. L., & Hawkes, G. R. The disadvantaged child. New York: Houghton Mifflin Company, 1966.

Goldberg, M. L. Adapting teacher style to pupil differences: teachers for disadvantaged children. Merrill-Palmer Quarterly, 1964, 10, 161-178.

Gottlieb, D., & Ramsey, C. E. The American Adolescent. Illinois: The Dorsey Press, Inc., 1964, Grams, A., Hafner, A. J., & Quast, W. Child-anxiety: Self estimates, parent reports, and teacher ratings. *Merrill-Palmer Quarterly*, 1965, 11, 261-266.

Groff, P. J. Culturally deprived children: opinion of teachers on the views of Riessman. *Exceptional Children*, 1964, 31, 61-65.

Haberman, M. Leadership in schools serving the educationally disadvantaged. *National Elementary Principal*, 1964, 44, 20-24.

Havighurst, R. J., *et al*. *Growing up in River City*. New York: John Wiley & Sons, 1944.

Henry, J. Docility or giving the teacher what she wants. *Journal of Social Issues*, 1955, 11, No. 2, 33-41.

Hollingshead, A. B. *Elmtown's youth*. New York: John Wiley & Sons, 1949.

Kennedy, W. A., Van de Riet, V., & White, J. C. A normative sample of intelligence and achievement of Negro elementary school children in the southeastern United States. *Child Development Monographs*, 1963, 28, No. 6, (Serial No. 90).

Keppel, F. Law and the human heart. *Childhood Education*, 1965, 41, 219-221.

L'Abate, L. Personality correlates or manifest anxiety in children. *Journal of Consulting Psychology*, 1960, 24, 342-348.

Maccoby, Eleanor E., Gibbs, Patricia K., *et al*. Methods of child-rearing in two social classes. In W. E. Martin and Celia B. Stendler (Ed.) *Readings in child development*. New York: Harcourt, Brace, and Company, 1954.

McQueen, Mildred. The culturally disadvantaged. *Research Report*, Science Research Associates, Inc., Chicago, 1965.

Olsen, J. Children of the ghetto. *High Points*, 1964, 46, 25-33.

Riessman, F. *The culturally deprived child*. New York: Harper and Row, 1962.

Schmalzried, Beverly L. The relationship of anxiety to the educational and occupational aspirations of lower-class adolescent males. Unpublished doctoral dissertation, The Florida State University, 1967.

Shaw, F. Educating the culturally deprived youth in urban centers. *Phi Delta Kappa*, 1963, 45, 91-97.

Stuart, I. R. Intergroup relations and acceptance of Puerto Ricans and Negroes in an immigrants' industry. Journal of Social Psychology, 1962, 56, 89-96.

Suinn, R. M., & Hill, H. Influence of anxiety on the relationship between self-acceptance and acceptance of others. Journal of Consulting Psychology, 1964, 28, 116-119.

Taylor, J. A. A personality scale of manifest anxiety. Journal of Abnormal Psychology, 1953, 48, 285-290.

Thelen, H. A. Teachability grouping. Department of Education, University of Chicago, August, 1961, Mimeographed.

The preparation of teachers for schools in culturally deprived neighborhoods (The BRIDGE Project). (Cooperative Research Project No. 935.) Flushing, New York: Queens College, 1965.

Warner, W. L., Havighurst, R. J., & Loeb, M. Who shall be educated? New York: Harper, 1944.

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This study was not a part of the original research design. After the data werecollected for the three-year period, the directors realized the value of obtaining the additional information with respect to the educational and vocational decisions that were made by the subjects who graduated from high school. The project directors decided that an attempt should be made to locate and interview the boys. This study has not been completed, but all information, except the analysis of the data is included in the following report.

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THE RELATIONSHIP BETWEEN EDUCATIONAL AND VOCATIONAL ASPIRATIONS AND ACTUAL ATTAINMENT AMONG LOWER-CLASS ADOLESCENT MALES

James F. Keller,* Ruth J. Dales, James Walters

One of the increasingly important questions among many of today's social scientists and educators is the concern for a greater development of our human resources. In a rapidly expanding world the demands for educationally and vocationally equipped youth far exceed the supply. There are too many youth with above average potential who lack aspiration needed to develop that potential. Our society has often expressed great pride in those few individuals of humble origin who have achieved vocational success, but has not expressed adequate concern over those many capable individuals of humble origin who have failed to develop their talents (Herriott, 1963.) Greater attention should be brought to that largely untapped area of human resources--the lower class. The need for more understanding of the factors which affect the fulfillment of educational and vocational aspirations of lower-class Negro and white youth is the concern of this study.

Factors Associated with Achievement

The distinctions in aspiration level of students is said to stem from a person's position within a social system (Gross, *et al*, 1958.) The differences in aspiration level of students from varied socio-economic backgrounds are not fully known (Hieronymus, 1951). It is generally believed that socio-economic status is highly correlated with such factors as school achievement, length of school attendance, participation in extra-curricular activities, and college attendance.

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Davis (1953) found that the value of education varies with differing social class, and Douvan (1956) and Youmans (1956) argue that social class is more primary than the type of community, the school, or work experience. Tesseneer and Tesseneer's (1958) review of studies indicates low socio-economic status is assoicated with leaving school before graduation. They also discovered that weak or broken homes were a cause of students' withdrawing from school.

Mulligan (1951) has stated that the low proportion of students in college from rural, semi-skilled and unskilled groups was due primarily to cultural factors rather than economic problems. Empey (1956) found occupational aspirations of high school seniors in the state of Washington to be significantly higher among the middle class and upper class as compared with seniors from the lower class. Middleton and Grigg (1959) found no significant differences among Negroes, urban and rural, as to educational and vocational aspirations. They did find urban whites were more likely to have higher educational and vocational aspirations than rural whites. Among tenth- and twelfth-grade Iowa boys the lowest educational and occupational aspirations were observed from farm boys and highest levels were found for metropolitan boys at both grade levels (Burchinal, 1961). Boyle (1966) reported that adolescents residents of smaller communities have lower aspirations. Taking the opposite viewpoint, Stephenson (1957) found that aspirations, which he defined as wishes or hopes, are unaffected by class, while plans and expectations are class based. Sewell and Shah (1967), from a randomly selected group of Wisconsin high school seniors over a seven-year period (1957-1964), found the relative effect of socio-economic status is less than the effect of intelligence for males with respect to planning for college, college attendance and college graduation.

Factors Associated with Attainment of Aspirations

Kahl (1953) indicated some working-class families have middle-class aspirations and values, and evidence indicates that some low socio-economic status boys derive satisfactions from getting good grades and making progress toward a valued goal. It is at this point that we have little information about the factors that affect the attainment of aspirations of lower-class youth. The evidence is abundant indicating that the lower class faces the greater obstacle in fulfilling their aspirations. But many do succeed in fulfilling their goals. More evidence is needed as to what factor motivates lower-class youth of ability to continue pressing toward fulfillment of their educational and occupational aspirations. Some evidence is available with respect to variables that influence attainment of educational and occupational aspirations but it comes from middle class samples. Hartson (1937) found a consistency between the vocational preferences stated in the senior year in high school, the senior year in college and the actual occupations that were eventually chosen. In a sample of 100 white middle class males Porter (1954) found a high consistency between what high school senior boys prefer to do, what they plan to do, and what they actually begin to do six months later. He also discovered that a large proportion of high school senior boys not only make somewhat definite vocational plans, but they actually follow those plans after they graduate.

Purpose

There is some evidence among white middle-class males (Hartson, 1937 & Porter, 1954) of a consistency between intended educational and vocational aspirations and their actual fulfillment. More information is needed concerning this consistency with lower-class youth. The purpose of this study is to observe the consistency of educational and vocational aspirations and to isolate the factors that affect fulfillment of these aspirations in a total sample consisting of 100 lower-class youth (57 Negro and 43 white) over a period of four years.

Description of Subjects

This study included data collected from the 214 subjects who graduated from high school at the end of the third year of the study. The boys have been involved in each of the three years of testing. The boys were interviewed six months after their graduation from high school. Addresses of the subjects were available from forms given at the last testing period of year three.

Letters were written to each of the boys who had graduated from high school in June, 1968, requesting an individual interview. A self-addressed stamped post card was enclosed with each letter. On the card several week and day options were listed as choices for possible interview periods. A deadline of one week was set for returning the cards. From the total of 214 letters mailed to the subjects, 16 cards were checked and returned. It was obvious that additional methods were needed for locating the boys and arranging for their interviews.

Two major approaches were taken. Since a large percentage of these boys had indicated intentions of entering college, the rolls of junior colleges and state universities in the North Florida area were checked. A number of the boys were enrolled, primarily in the junior colleges. The researchers made arrangements with the appropriate college personnel at the respective colleges to set up the interviews after or between classes. The other approach involved trips to the towns where the boys lived. High school guidance counselors, post masters and other appropriate community persons were contacted for help in locating the boys, since few of the boys' families had telephones or street addresses. Most addresses were listed as rural routes. Once a boy was found he often knew if any of the other boys we needed were still living in their home town. They usually knew which boys were unreachable. On a few occasions a local boy served as a guide for the researchers, directing them to places the boys were known to frequent. Interviews took place in a variety of places: college lounge, faculty offices, saw mill, auto repair shop, grocery store stockroom, service station, department store, car, and homes. At the time of this writing 100 of the 214 graduating seniors have been interviewed. This number included 43 white and 57 Negro boys, representing 18 different schools.

The fact that three years of information is available on lower-class boys who have continued to fulfill their goals through high school and beyond represents a significant resource for understanding attainment among the culturally deprived. Overwhelming evidence has shown that successful accomplishment of educational and occupational goals by the lower class occurs in the presence of great obstacles. To discover some of the forces that contribute to fulfillment, under these circumstances, represents a major step toward the more full development of the resources of the lower class.

For three years the subjects have given data which reflected their educational and occupational aspirations. With the information available from the interviews a measure of the attainment of these aspirations can be documented. But even more crucial is to discover the factors which contribute to and detract from the fulfillment of aspirations. The interview data related to the battery of instruments given the subjects over a three-year period makes this a possibility.

The major relationships to be studied include the consistency over four years of educational and vocational aspirations of Negro and white culturally deprived boys. In addition, differences between Negro and white boys with respect to fulfillment of aspirations will be noted. Further, the effect on fulfillment of aspirations by the following variables will be studied: self concept, family adjustment, anxiety, family problems, teacher ratings, primary incentives, employment of mother, and IQ.

Instruments

Seven of the instruments which were administered as part of the larger contract research program will be utilized in this study of the relationship between educational and vocational aspirations and actual attainment among lower-class adolescent males. Each instrument was administered every year to the subjects during the three-year longitudinal study. An additional instrument was developed specifically for the interviews with graduating seniors.

The interview schedule was designed to measure the actual educational and vocational attainments of the seniors who have graduated from high school. The specific educational and vocational choices made by the subjects was assessed along with perceived obstacles, use of spare time, source of motivation, current educational and vocational designs, and satisfaction with their current plans.

REFERENCES

Boyle, R. P. Community influence on college aspirations: An empirical evaluation of explanatory factors. Rural Sociology, September, 1966, 31 (3), 227-293.

Burchinal, L. G. Differences in educational and occupational aspirations of farm, small-town, and city boys. Rural Sociology, 1961, 25, 107-121.

Davis, J. S. Social Class factors and school attendence. Harvard Educational Review, 1953, 23, 175-185.

Douvan, J. S. Social status and success strivings. Journal of Abnormal and Social Psychology, 1956, 52, 219-223.

Empey, LeMar. Social class and occupational aspiration: A comparison of absolute and relative measurement. American Sociological Review, 1956, 21, 703-709.

Gross, N.C., Mason, W.S., & McEachern, A. W. Explorations in role analysis: Studies of the school superintendency role. New York: John Wiley and Sons, Inc., 1965.

Hartson, L. D. Vocational choices: Before and after college. Occupations, 1932, 16, 585-591.

Herriott, R. E. Some social determinants of educational aspiration. Harvard Educational Review, 1963, 33, 155-177.

Hieronymus, A. N. A study of social class motivation: Relationships between anxiety for education and certain socio-economic and intellectual variables. Journal of Educational Psychology, 1951, 42, 193-205.

Kahl, J. A. Educational and occupational aspirations of "common man boys," Harvard Educational Review, Summer, 1963, 23, 186-203.

Mulligan, R. A. Socio-economic background and college enrollment. American Sociological Review, April, 1951, 16, 188-196.

Porter, L. G. & Stacey, C. L. A study of the relationship between self ratings and parent ratings for a group of college students. Journal of Clinical Psychology, 1956, 12, 243-248.

Sewell, W. & Shah, V. P. Socio-economic status, intelligence and the attainment of higher education, Sociology of Education, 1967, 40 (1), 1-24.

Stephenson, R. M. Mobility orientation and stratification of 1,000 ninth graders. American Sociological Review, April, 1957, 22, 204-212.